

SoundEarth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, Washington 98102

INTERIM REMOVAL ACTION COMPLETION REPORT

THIRD MODIFICATION FOR THE ADMINISTRATIVE ORDER ON CONSENT FOR REMOVAL ACTION—JORGENSEN FORGE OUTFALL SITE



Property:

Jorgensen Forge Outfall Site 8531 East Marginal Way Seattle, Washington

Report Date:

November 30, 2015

Prepared for:

U.S. Environmental Protection Agency Region 10 1200 Sixth Avenue Seattle, Washington



Interim Removal Action Completion Report
Third Modification for the Administrative Order on
Consent for Removal Action—Jorgensen Forge Outfall Site

Jorgensen Forge Outfall Site 8531 East Marginal Way Seattle, Washington 98101 CERCLA Docket No. 10-2011-0017

Prepared for:

U.S. Environmental Protection Agency 1200 Sixth Avenue Seattle, Washington 98101

Prepared on Behalf Of:

Jorgensen Forge Corporation 8531 East Marginal Way Seattle, Washington and:

The Boeing Company
P.O. Box 3707
Seattle, Washington 98108

November 30, 2015



TABLE OF CONTENTS

ACI	KONTI	/IS AND ADDREVIATIONS III
1.0	INTRO	DUCTION 1
2.0	INTERI	M REMOVAL ACTION1
	2.1	EXCAVATION APPROACH
	2.2	SITE PREPARATION
	2.3	SCOPE OF EXCAVATION AND CMP REMOVAL
	2.4	EQUIPMENT DECONTAMINATION
3.0	SAMPI	ING AND ANALYSIS3
	3.1	RESULTS OF CONFIRMATION SAMPLING AND ANALYSIS
	3.2	QUALITY ASSURANCE/QUALITY CONTROL SAMPLES
	3.3	DATA VALIDATION4
	3.4	SITE RESTORATION
4.0	WASTI	MANAGEMENT 5
5.0	VARIA	NCE FROM PLAN 6
6.0	BIBLIO	GRAPHY7
FIG	URE	
1	Limit	s of Excavation and Confirmation Sample Location Map, Unshored Excavation Areas
TAE	BLES	•
1	Sum	mary of Soil Analytical Results
2		mary of Coordinates for Performance and Confirmation Sample Locations
AT	ГАСНІ	MENTS
Α	Site I	Photographs
В	Labo	ratory Analytical Reports
		ARI Report No. AML7, dated September 16, 2015
		ARI Report No. AMN4, dated September 17, 2015
		ARI Report No. AMO6, dated September 17, 2015

ARI Report No. AMV1, dated September 23, 2015

TABLE OF CONTENTS (CONTINUED)

ARI Report No. AMW0, dated October 5, 2015 ARI Report No. ANA4, dated October 6, 2015 ARI Report No. ANA5, dated October 6, 2015

- C Data Validation Report
- D Disposal Receipts

ACRONYMS AND ABBREVIATIONS

ARI Analytical Resources, Inc.

BMP best management practice

Boeing The Boeing Company

CERCLA Comprehensive Environmental Response, Compensation, and Liability

Act

CMP corrugated metal pipe

EPA U.S. Environmental Protection Agency

Interim RACR Interim Removal Action Completion Report

JFOS Jorgensen Forge Outfall Site (the area encompassing the northwest

corner of the Jorgensen Forge Property and the southwest corner of the Boeing Plant 2 Property, subject to CERCLA Docket No. 10-2011-0017)

mg/kg milligrams per kilogram

NAD83 North American Datum, 1983

NAVD88 North American Vertical Datum, 1988

Order Administrative Order on Consent for Removal Action, Comprehensive

Environmental Response, Compensation, and Liability Act Docket No. 10-

2011-0017

PCB polychlorinated biphenyl

PPE personal protective equipment

Pyron Environmental, Inc.

QA/QC quality assurance/quality control

QAPP Quality Assurance Project Plan

SAP Sampling and Analysis Plan

SoundEarth Strategies, Inc.

ACRONYMS AND ABBREVIATIONS (CONTINUED)

Third Modification

Third Administrative Order on Consent for Removal Action, Comprehensive Environmental Response, Compensation, and Liability Act Docket No. 10-2011-0017

USACE

U.S. Army Corps of Engineers

Interim Removal Action Completion Report Third Modification to the Administrative Order on Consent for Removal Action—Jorgensen Forge Outfall Site

1.0 INTRODUCTION

This Interim Removal Action Completion Report (Interim RACR) has been prepared by SoundEarth Strategies, Inc. (SoundEarth) on behalf of the Jorgensen Forge Corporation and The Boeing Company (Boeing) pursuant to the *Third Modification to the Administrative Order on Consent for Removal Action* (Order) at the Jorgensen Forge Outfall Site (Third Modification; EPA 2015a).

The purpose of this Interim RACR is to document the Unshored Excavation Area removal action completed between September 14 and 23, 2015, in the eastern portion of the Jorgensen Forge Outfall Site (JFOS; Figure 1) that is the focus of the Third Modification. The data presented in this Interim RACR document compliance with the cleanup level of 1 milligram per kilogram (mg/kg) polychlorinated biphenyls (PCBs) in soil within the completed eastern (unshored) portion of the JFOS.

Corrugated Metal Pipe (CMP) removal activities in the remaining western (shored) portion of the JFOS are scheduled to commence in Second or Third Quarter 2016. Following the removal action in the Shored Excavation Area, a final RACR will be submitted to the U.S. Environmental Protection Agency (EPA) in accordance with the CMP Work Plan dated August 14, as revised through September 24 (SoundEarth 2015), and subject to further revision based on EPA comments dated October 29.

2.0 INTERIM REMOVAL ACTION

The interim action was initiated in September 2015 to meet EPA's time-critical action requirement by commencing a portion of the overall project no later than September 17. The portions of the overall project that were straightforward to initiate included the removal by excavation of the anomalous PCB occurrence from the location of boring 2-66-SP-10 and the CMPs and associated PCBs from areas that did not require engineered shoring (collectively, the Unshored Excavation Area).

The Unshored Excavation Area removal action commenced on September 14 in accordance with the CMP Work Plan and EPA's Conditional Approval letter dated September 11 (EPA 2015b). U.S. Army Corps of Engineers (USACE) personnel represented the EPA throughout the interim removal action field activities, which were completed on September 23, 2015. Selected photographs are included in Attachment A of this Interim RACR.

2.1 EXCAVATION APPROACH

PCB-contaminated soils within the Unshored Excavation Area were (1) within approximately 12 feet of the ground surface, (2) above the groundwater table, and (3) accessible to standard excavation equipment without the use of engineered shoring. Therefore, the interim removal action excavation approach for the Unshored Excavation Area was (1) a targeted spot excavation at the location of boring 2-66-SP-10 and (2) a larger open excavation supported with a trench box to remove both CMPs and

associated soils underlying the CMPs, if warranted by confirmation sampling. The CMP in this area was approximately 32 feet in length and the smaller 12-inch CMP appeared to angle to the larger 24-inch CMP, implying that the 12-inch CMP may in actuality be connected to the 24-inch CMP somewhere within the shored excavation area.

The main objective of the spot and open excavation approaches was to demonstrate compliance with the cleanup level of 1 mg/kg total PCBs in remaining soil.

2.2 SITE PREPARATION

Site preparation activities included installation of survey control points, a preconstruction site walk with owners' representatives and the contractor, and installation of best management practices (BMPs) to control stormwater runoff and mitigate dust in the vicinity of the work area.

- On August 20, Axis Survey and Mapping of Kirkland, Washington, installed survey control points at four locations for reference during construction. Specifically, survey hubs were placed above the CMP centerline of each clay-to-CMP transition point, and at the "ESE Corner" and "SE Corner" of the Unshored Excavation Envelope (Figure 4 of the CMP Work Plan). The horizontal datum for the JFOS project is North American Datum 1983 (NAD83) and the vertical datum in North American Vertical Datum 1988 (NAVD88).
- During the preconstruction site walk on September 11, the pavement patch for boring 2-66-SP-10 was field-verified and marked using directional offset measurements. The offset measurements enabled the spot excavation to be centered at the boring location after the pavement had been removed.
- BMPs included site controls in the form of a demarcated exclusion zone and a decontamination zone equipped with a boot wash to prevent tracking of contaminants beyond the limits of the work area. The excavator bucket and trench box were suspended over the trench box excavation during the decontamination process. A silt fence was installed, spanning the west, downhill side of the work area to slow and remove suspended solids from stormwater runoff. The silt fence was placed downhill to the west of the Unshored Excavation Area, and uphill to the east of the existing steel sheet pile wall that marks the boundary between the JFOS and the Duwamish Waterway. In addition to the silt fence, exposed soils south-adjacent to the JFOS were covered with heavy duty plastic sheeting to protect underlying soils from dust, precipitation, and incidental spillage of soil particles (Attachment A, Photograph 1).

2.3 SCOPE OF EXCAVATION AND CMP REMOVAL

The removal action commenced on September 14 with the spot excavation at the location of boring 2-66-SP-10. The spot excavation was advanced to Elevation +9 feet relative to NAVD88 (approximately 7 feet below pavement surface), and subsequently deepened on September 21 to Elevation +6 feet, based on the results of the first round of confirmation sampling (Section 3.1).

The dimensions of the larger CMP removal excavation measured 36 feet east-west by 14 feet north-south. The north-south dimension represented the width required to accommodate a trench box and allow removal of the two CMPs. The sidewalls of the CMP removal excavation were nominally vertical. The north and south sidewalls were supported using trench boxes, supplemented with steel plates to protect the east and west endwalls. The bottom of the CMP removal excavation was advanced to Elevation +6 feet under the 12-inch CMP, and Elevation +5 feet under the 24-inch CMP, equal to the bottom elevations of each CMP.

The sections of CMP removed in the Unshored Excavation Area appeared to be in good condition (i.e., without any visible holes or other signs of corrosion or damage). Soil and CMP removed from the Unshored Excavation Area were segregated and disposed as described in Section 4.0 of this Interim RACR.

2.4 EQUIPMENT DECONTAMINATION

The excavator bucket and trench box required decontamination following use. Additionally, at the request of USACE personnel, the excavator bucket was decontaminated once after Subtitle D material had been removed from the trench box excavation, prior to excavating Subtitle C materials. Equipment decontamination was performed in accordance with the Decontamination Procedures presented in Appendix D of the CMP Work Plan.

3.0 SAMPLING AND ANALYSIS

Samples collected for this project were analyzed for PCBs by EPA Method 8082A by Analytical Resources, Inc. (ARI) of Tukwila, Washington, a Washington State-accredited environmental laboratory and National Environmental Laboratory Accreditation Program-certified by the Oregon Environmental Laboratory Accreditation Program (ORELAP identification number WA100006; EPA code WA00037).

The scope of PCB analysis included the nine PCB Aroclors 1016, 1221, 1232, 1242, 1248, 1254, 1260, 1262, and 1268. In the calculation of total PCB concentrations, SoundEarth added together the detected values of individual Aroclors; if an Aroclor was not detected, then that undetected Aroclor was assigned a concentration of zero for summation purposes.

On the transmittal page of each report, ARI indicated whether or not the data quality had been affected by any incidents of note. Analytical results were flagged in accordance with the appropriate Data Reporting Qualifier in the event that data quality was affected (e.g., reporting limit raised due to chromatographic interference). Laboratory reports are included in Attachment B.

3.1 RESULTS OF CONFIRMATION SAMPLING AND ANALYSIS

The scope of sampling included the collection and analysis of confirmation and post-construction baseline surface soil samples. In addition, one field quality assurance/quality control (QA/QC) sample

(an equipment rinsate water sample) was collected during the removal action in accordance with the CMP Work Plan. The analytical results are presented on Table 1 and summarized below:

- The confirmation sample collected from the bottom of the initial spot excavation on September 14 at location number 11 had a total PCB concentration of 1.14 mg/kg, which exceeded the cleanup level and, accordingly, the spot location was further excavated on September 21. The bottom of the spot excavation and each of four sidewalls were resampled. The confirmation sample collected from the final bottom of the spot excavation at boring 2-66-SP-10 (sample location number 11) had a total PCB concentration less than the cleanup level.
- The total PCB concentrations in the confirmation samples collected from locations 7, 8, 9, and 10, directly under the former CMPs, were all less than the cleanup level of 1 mg/kg. These results were consistent with field observations of the CMP, which appeared to be in good condition with no visual indications of perforation or leakage to surrounding soils.
- Four sidewall confirmation samples were collected from the spot excavation on September 14. PCB concentrations in the four sidewall confirmation samples were all below 1 mg/kg, demonstrating lateral compliance with the cleanup level surrounding boring location 2-66-SP-10. These locations were resampled on September 21 when the spot excavation was deepened. These four additional sidewall samples also all contained total PCB concentrations that were less than the cleanup level.
- Three post-construction baseline surface samples of the backfill material were collected at approximately Elevation +15.5 at sample locations 9, 10, and 11. PCBs were not detected in the baseline samples.

3.2 QUALITY ASSURANCE/QUALITY CONTROL SAMPLES

The Sampling and Analysis Plan/Quality Assurance Project Plan (SAP/QAPP) appended to the CMP Work Plan requires the collection of field duplicates at a frequency of approximately 5 percent (1 per 20), or a fraction thereof, of the total number of water samples, and the collection of equipment rinsate blanks at a frequency of 5 percent of the total number of soil samples. No water samples were collected in connection with the interim removal action; therefore, no field duplicate samples were collected.

SoundEarth collected one equipment rinsate water sample in connection with the field sampling activities completed on September 23. PCBs were not detected in the QA/QC sample, an equipment rinsate sample that was obtained by pouring laboratory-supplied deionized water over the stainless steel spoon used to collect confirmation sample number CMP24-B10-1+05. The spoon was decontaminated in the same manner as the excavator bucket and trench box, in accordance with the Decontamination Procedures in Appendix D of the CMP Work Plan.

3.3 DATA VALIDATION

Pyron Environmental, Inc. (Pyron) of Olympia, Washington, performed Stage 2B data validation on ARI laboratory report numbers AML7, AMN4, AMO6, AMV1, AMW0, ANA4, and ANA5. Pyron's assessment

concluded that the PCB data are of known quality and acceptable for use as qualified. A summary of data affected by anomalies is provided in Table 1 of Pyron's data validation report, which is included in this Data Report as Attachment C.

3.4 SITE RESTORATION

Upon receipt of analytical results for each batch of confirmation samples, a preliminary data package was submitted to the EPA for review. Following review of each preliminary data package, the EPA responded on September 18 and 22, via email, with authorization to backfill each of the two excavation areas.

On September 21, the CMP removal excavation was backfilled using a foot-thick layer of quarry spalls to stabilize the base before clean, imported pit run was placed and compacted. Pit run was placed and compacted to an elevation approximately one foot below surrounding grades, with a slight depression in the center, to promote infiltration of runoff inside the footprint of the CMP removal excavation. Finally, approximately one-foot of quarry spalls was placed over the footprint of the CMP removal excavation to match surrounding grades.

On September 23, the spot excavation was backfilled with clean, compacted, imported pit run to match the surrounding pavement grades.

4.0 WASTE MANAGEMENT

The interim removal action generated two regulated waste streams: Subtitle D soil (PCB concentrations less than or equal to 50 mg/kg, including used personal protective equipment [PPE]) and Subtitle C soil (PCB concentrations presumed greater than 50 mg/kg). The two classes of waste were segregated, managed, and disposed in accordance with the CMP Work Plan:

- Subtitle D soil removed from the spot excavation at boring 2-66-SP-10 and above the CMPs was placed into dump trucks and transported to Waste Management's Seattle, Washington, transfer station for disposal at Columbia Ridge Landfill in Arlington, Oregon. PPE generated during this project was combined with the Subtitle D waste soil. A total of 17.38 tons of soil and PPE were disposed of as Subtitle D waste.
- The CMPs, along with soil removed at or below the tops of the CMPs was direct loaded into lined roll-off containers, and transported to U.S. Ecology's facility in Grand View, Idaho, for disposal as Subtitle C waste. A total of 115.04 tons of soil were disposed of as Subtitle C waste.

In addition to the above-listed regulated waste streams, concrete pavement that was demolished in preparation for this removal action was recycled at JEV Recycling of Woodinville, Washington. Summaries of the waste tonnages disposed at each facility are included in Attachment D of this Interim RACR.

5.0 VARIANCE FROM PLAN

Upon review and evaluation of the data obtained in connection with the Unshored Excavation Area removal action at JFOS, SoundEarth identified the following variance from the plan:

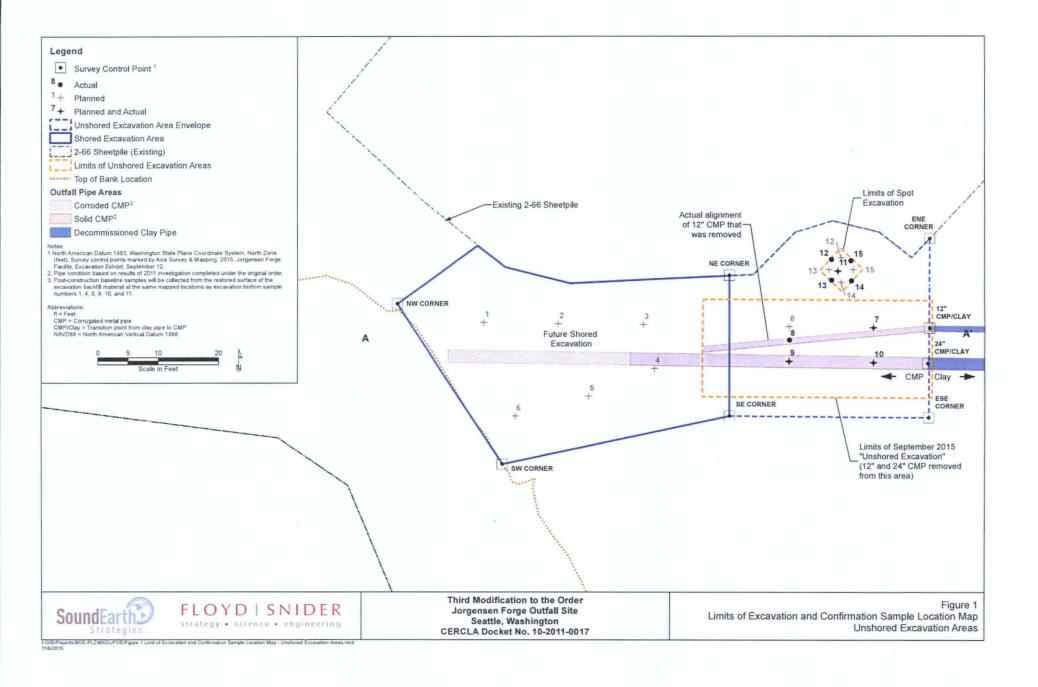
- Due to equipment access limitations, the spot excavation at the location of boring 2-66-SP-10 was oriented at a 45-degree angle relative to the planned orientation. The bottom sample was collected at the planned coordinates, but each sidewall sample was collected one to two feet away from the planned coordinates listed in Section 4.6.1 of the SAP/QAPP due to the slightly revised alignment. Planned and actual sample coordinates are provided in Table 2 attached to this Interim RACR.
- The actual alignment of the 12-inch CMP varied from the mapped alignment assumed from old drawings, and the priority for confirmation sampling was to characterize soil directly under the 12-inch CMP. Therefore, the coordinates for the 12-inch CMP confirmation soil samples (sample location nos. 7 and 8) varied from 1 to 3 feet from the planned coordinates presented in Section 3.1 of the SAP/QAPP. Planned and actual sample coordinates are provided in Table 2 attached to this Interim RACR.

6.0 BIBLIOGRAPHY

- SoundEarth Strategies, Inc. (SoundEarth). 2015. Corrugated Metal Pipe Work Plan, Third Modification for the Administrative Order on Consent for Removal Action, Jorgensen Forge Outfall Site, 8531 East Marginal Way South, Seattle, Washington. August 14. Revised September 2 and 24.
- U.S. Environmental Protection Agency (EPA). 2015a. Third Modification for Administrative Order on Consent for Removal Action, Jorgensen Forge Outfall Site, with Jorgensen Forge Corporation, Boeing Company, and EPA. CERCLA Docket No. 10-2011-0017. June 25.

	201	5b. <i>US</i>	EPA C	onditio	nal Appı	roval	and	Notice	to	Proceed	with	the	Time	Critical
Remo	oval Actio	on—Jo	rgenser	n Forge	Outfall	Site	Corru	ugated	Ме	tal Pipe	Work	c Pla	n, Joi	gensen
Forge	Outfall (Cleanu	p, Lowe	r Duwa	mish Wo	aterwa	ay Su	perfund	d Sit	e, Seattl	e, WA	. Sep	temb	er 11.

FIGURE



TABLES



Table 1 Summary of Soil Analytical Results Jorgensen Forge Outfall Site Third Modification 8531 East Marginal Way South Seattle, Washington CERCLA Docket No. 10-2011-0017

	Confirmation Sample No. from					Sample Elevation ⁽¹⁾	Polychlorinated Biphenyls ⁽²⁾ (mg/kg)										
Area	Figure 7 of the CMP Work Plan and Section 3.1 of the SAP	Sample ID	Description of Sample Location	ARI Report No.	Sample Date		Aroclor 1016	Aroclor 1221	Aroclor 1232	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1262	Aroclor 1268	Total PCBs ⁽³⁾	Comments
							REMOVAL	ACTION COM	IFIRMATION	SAMPLES							
	11	266-811-1+9	Bottom	AML7	09/15/15	+9	<0.097	<0.097	<0.097	<0.097	<0.097	0.820	0.320	<0.097	<0.097	1.140	Removed on 9/21/2015 and resampled. See * below.
Unshored Excavation / Spot	12	266-N12-1+13	North Sidewall	AML7	09/15/15	+13	<0.095	<0.095	<0.095	<0.095	<0.095	0.570	0.280	<0.095	<0.095	0.850	
excavation / Spot	13	266-W13-1+11	West Sidewall	AML7	09/15/15	+11	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	
Boring 2-66-SP-10	14	266-514-1+13	South Sidewall	AML7	09/15/15	+13	<0.019	<0.019	<0.019	< 0.019	< 0.019	< 0.019	<0.019	<0.019	<0.019	< 0.019	
	15	266-E15-1+11	East Sidewall	AML7	09/15/15	+11	<0.019	<0.019	<0.019	<0.019	<0.019	<0.029 Y	0.220	<0.019	<0.019	0.220	
Unshored	7	CMP12-B07-1+06	Under 12" CMP, NE Quadrant	AMO6	09/16/15	+6	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	
Excavation /	8	CMP12-B08-1+06	Under 12" CMP, NW Quadrant	AMN4	09/15/15	+6	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	
renchbox Area for	9	CMP24-B09-1+05	Under 24" CMP, SW Quadrant	AMN4	09/15/15	+5	<0.020	<0.020	<0.020	<0.020	<0.059 Y	0.360	0.066	<0.020	<0.020	0.426	
CMP Removal	10	CMP24-B10-1+05	Under 24" CMP, SE Quadrant	AMO6	09/16/15	+5	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	0.039	<0.018	0.039	
	11	266-811-2+06	Bottom	AMV1	09/21/15	+6	< 0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.061	<0.015	<0.015	0.061	
Unshored	12	266-N12-2+07	North Sidewall	AMV1	09/21/15	+7	< 0.015	< 0.015	<0.015	<0.015	<0.015	<0.051 Y	0.230	<0.015	<0.015	0.230	
Excavation / Spot xcavation Centered	13	266-W13-2+07	West Sidewall	AMV1	09/21/15	+7	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	
t Boring 2-66-SP-10		266-514-2+07	South Sidewall	AMV1	09/21/15	+7	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	
	15	266-E15-2+07	East Sidewall	AMV1	09/21/15	+7	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.030	<0.015	<0.015	0.030	
							POST-CO	ONSTRUCTION	BASELINE SA	IMPLES							
Unshored	9	JFOS3-PC09+15	Southwest Surface Sample	AMWO	09/21/15	+15	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	
Excavation Areas,	10	JFOS3-PC10+15	Southeast Surface Sample	AMWD	09/21/15	+15	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	
September 2015	11	JFOS3-PC11+15	North Surface Sample	ANA4	09/23/15	+15	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	< 0.017	

QUALITY ASSURANCE/QUALITY CONTROL SAMPLE WATER SAMPLE RESULTS REPORTED IN MICROGRAMS PER LITER (\(\mu g/L \)																	
Unshored Excavation Areas, September 2015	10	CMP24-B10+05R	Equipment Rinsate Sample (Water)	ANA5	09/23/15	NA	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	
Cleanup Level:										anup Level:	COTTO 1						

Red text signifies PCB concentration above the cleanup level

Results in **bold** denote a detected concentration.

Results reported in mg/kg dry weight, unless noted otherwise. (1) Elevation in feet relative to North American Vertical Datum, 1988.

(ii) Analyzed by EPA Method 8082A.

⁽⁸⁾ Total PCIs are calculated by summing the detected PCB Aroclor concentrations.

LABORATORY DATA QUALIFIERS

Y = The analyte is not defected at or above the reporting limit. The reporting limit is raised due to chromatographic interference.

ABBREVIATIONS AND SYMBOLS:

- < = indicates that the target analyte was not detected at the reported concentration
- ARI = Analytical Resources, Inc.
- CMP = corrugated metal pipe EPA = U.S. Environmental Protection Agency
- ID = identification
- mg/kg = milligrams per kilogram dry weight.
- PCB = polychlorinated biphenyl SAP = Sampling and Analysis Plan
- μg/L = micrograms per liter



Table 2 Summary of Coordinates for Peformance and Confirmation Sample Locations Jorgensen Forge Outfall Site Third Modification Seattle, Washington CERCLA Docket No. 10-2011-0017

CONFIRMATION SAMPLE LOCATION NO. (FROM FIGURE 7 OF THE CMP WORK PLAN AND SECTION 3.1 OF THE SAP)	CONFIRMATION SAMPLE ID NO.	PLANNED EASTING COORDINATE ¹ (ft)	PLANNED NORTHING COORDINATE ¹ (ft)	ACTUAL EASTING COORDINATE ² (ft)	ACTUAL NORTHING COORDINATE ² (ft)	EAST-WEST VARIANCE, PLANNED MINUS ACTUAL (ft)	NORTH-SOUTH VARIANCE, PLANNED MINUS ACTUAL (ft)	COMMENTS
1	NA	1275786.5	195806.7	NA	NA	NA	NA	Future phase of work scheduled for Second Quarter 2016
2	NA	1275798.8	195806.5	NA	NA	NA	NA	Future phase of work scheduled for Second Quarter 2016
3	NA	1275812.8	195806.3	NA	NA	NA	NA	Future phase of work scheduled for Second Quarter 2016
4	NA	1275814.7	195799.1	NA	NA	NA	NA	Future phase of work scheduled for Second Quarter 2016
5	NA	1275803.8	195794.5	NA	NA	NA	NA	Future phase of work scheduled for Second Quarter 2016
6	NA	1275791.7	195791.2	NA	NA	NA	NA	Future phase of work scheduled for Second Quarter 2016
7	CMP12-B07-1+06	1275850.8	195805.8	1275851	195805	0	1	Actual 12" angles south of mapped alignment; sample collected under actual CMP
8	CMP12-B08-1+06	1275836.9	195806.0	1275837	195803	0	3	Actual 12" angles south of mapped alignment; sample collected under actual CMP
9	CMP24-B09-1+05	1275836.9	195800.2	1275837	195800	0	0	Zero variance
10	CMP24-B10-1+05	1275850.8	195800.0	1275851	195800	0	0	Zero variance
11	266-B11-1+09	1275845.0	195815.1	1275845	195815	0	0	Zero variance
12	266-N12-1+13	1275845.5	195817.3	1275844	195817	2	1	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11
13	266-W13-1+11	1275843.5	195815.3	1275844	195814	-1	2	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11
14	266-S14-1+13	1275845.5	195813.3	1275847	195814	-2	-1	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11
-15	266-E15-1+11	1275847.5	195815.3	1275847	195817	1	-2	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11
11	266-B11-2+06	1275845.0	195815.1	1275845	195815	0	0	Zero variance
12	266-N12-2+07	1275845.5	195817.3	1275844	195817	2	1	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11
13	266-W13-2+07	1275843.5	195815.3	1275844	195814	-1	2	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11
14	266-S14-2+07	1275845.5	195813.3	1275847	195814	-2	-1	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11
15	266-E15-2+07	1275847.5	195815.3	1275847.0	195817	1	-2	Actual excavation oriented 45 degrees relative to planned orientation, and centered on sample location no. 11

NOTES:

CMP = Construction Management Plan

ft = feet

NA = not applicable

SAP = Sampling and Analysis Plan

North American Datum 1983, Washington State Plane Coordinate System, North Zone (feet)

² Field tape measurements from survey control points located by Axis Survey & Mapping, 2015. Jorgensen Forge Facility, Excavation Exhibit, September 12.

ATTACHMENT A SITE PHOTOGRAPHS



Photograph 1. Site preparation, viewing west. Plastic sheeting protects south-adjacent project, silt fence spans the down-slope end of work area. Survey control stakes placed for reference.



Photograph 2. Commencement of removal action on September 14, 2015, viewing south.



Photograph 3. Spot excavation at location of boring 2-66-SP-10, viewing south.



Photograph 4. CMP in good condition and resistant to pressure from excavator bucket. Subtitle C material beneath the tops of the CMP.



Photograph 5. Removal of CMP from the Unshored Excavation Area, viewing north.



Photograph 6. Unshored excavation areas backfilled and protected with one foot of quarry spalls, viewing northwest. Existing 2-66 sheet pile wall visible at left.

Page 1 of 1



Project No.: 10-2011-0017

Date Range: September 14 - 23, 2015

Drawn By: DHG

Checked By: DHG

File ID:

Project Photographs

INTERIM ACTION PHOTOGRAPHS

Jorgensen Forge Outfall Site Third Modification 8531 East Marginal Way South Seattle, Washington

ATTACHMENT B LABORATORY ANALYTICAL REPORTS

Analytical Resources, Inc. Report No. AML7 SoundEarth Strategies, Inc.



16 September 2015.

Dee Gardner Sound Earth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

RE: JFOS3

ARI Job No.: AML7

Dear Dee:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. received five soil samples on September 15, 2015. The samples were analyzed for PCBs as requested.

These analyses proceeded without incident of note.

If you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

cc: Miles Dyer, Jorgensen Forge file AML7

Enclosures

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:	Turn-	-around	Requested:	24 40	urs.	Page	1	of	١				Analytic	cal Resources, Incorporated cal Chemists and Consultants outh 134th Place, Suite 100
ARI Client Company: JORGENSEN FORGE	(0)	0.0	Phone:	62.110	0	Date	9/15/1	5 Ice Prese	ent?				Tukwila	, WA 98168
Client Contact:		-		000		No. of Cooler						5-6200 206-695-6201 (fax) ilabs.com		
MILES DYER						Coolers: Temps:					.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	nubs.com		
Client Project Name:								114	Analysis	Requested T				Notes/Comments
Client Project #:	Samp	plers:	T. LOEFF	FLER		8082								STAGE 2B REPORTING PER
Sample ID	0	Date	Time	Matrix	No. Containers	PCES E								SAP/QAPP
266-N12-1+13	9/1	5/15	0845	SOIL	1	×								
266-514-1+13			0855		1	×								
266-W13-1+11			0900		1	×								
266-E15-1+11			0905		1	×								
266-B11-1+9	J	e.	0909	T	1	×								
			3											
						J	H	9/15/1	5					
			-									_		
												\rightarrow		
Comments/Special Instructions		uished by:	1		Received by:	VAI			Relinquished	by:		1	leceived by:	
CC: DEE GARDNER AT	(Signat	Name:	ener		(Signature) Printed Name:	001			(Signature) Printed Nam	e.			Signature)	
SOUNDEARTH			AN LOEF	FLER	En	Adin	ithi	M	Printed Nam	·		- 1"	mad Name	
dgardner esoundearth Company: SoundEARTH					Company:	21	VIIV		Company:			C	ompany:	
inc.com	Date &	Time:	5@0	945	Date & Time:	IS.	945		Date & Time	:		D	ate & Time:	

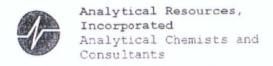
Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or cosigned agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.



Cooler Receipt Form

ARI Client: JOY GEN SEN FORGE	Project Name: JF0S	3		
COC No(s): NA	Delivered by: Fed-Ex UPS Cour	rier Hand Celiv	ered Other	
Assigned ARI Job No: AMU 7	Tracking No:		gred Other.	(KIA)
Preliminary Examination Phase:	Tracking No			- NA
	the sutelide of the section?		VEC	CNO
Were intact, properly signed and dated custody seals attached to			YES	
Were custody papers included with the cooler?			YES	NO
Were custody papers properly filled out (ink, signed, etc.)		(YES	NO
If cooler temperature is out of compliance fill out form 00070F		Temp Gun ID	#: DOOS	25/05
Cooler Accepted by:		945	4	
	and attach all shipping documents			
Log-In Phase:				
Was a temperature blank included in the cooler?			YES	(NO.
What kind of packing material was used? Bubble Wrap		Block Paper (Other:	
Was sufficient ice used (if appropriate)?	••••••	NA	YES	(NO)
Were all bottles sealed in individual plastic bags?			YES	(NO)
Did all bottles arrive in good condition (unbroken)?			YES	NO
Were all bottle labels complete and legible?			YES	NO
Did the number of containers listed on COC match with the number	er of containers received?		YES	NO
Did all bottle labels and tags agree with custody papers?			YES	NO
Were all bottles used correct for the requested analyses?			YES	NO
Do any of the analyses (bottles) require preservation? (attach pre-	servation sheet, excluding VOCs)	NA	YES	(NO)
Were all VOC vials free of air bubbles?		(NA)	YES	NO
Was sufficient amount of sample sent in each bottle?			YES	NO
Date VOC Trip Blank was made at ARI		NA		
Was Sample Split by ARI : NA YES Date/Time:	Equipment:		Split by:	
Samples Logged by: Date:	C. 11-11.	1040)	
** Notify Project Manager	r of discrepancies or concerns **			
Sample ID on Bottle Sample ID on COC	Sample ID on Bottle	Sam	ple ID on C	COC
Additional Notes, Discrepancies, & Resolutions:				
By: Date:				
Small Air Bubbles Peabubbles' LARGE Air Bubbles	Small → "sm" (<2 mm)			
- 2mm 2-4 mm > 4 mm	Peabubbles → "pb" (2 to < 4 mm)			
	Large → "lg" (4 to < 6 mm)			
	Headspace → "hs" (>6 mm)			



Cooler Temperature Compliance Form

Cooler#: Tempe	rature(°C):	y
Sample ID	rature(°C):	Bottle Type
Sample ID All Samples Pererved anove	Dotte Count	1,100
OH SOUVINGS		
received above		
V.C		
V. V.		· ·
	-	
Cooler#: Tempe	rature(°C): Bottle Count	
Sample ID	Bottle Count	Bottle Type
*		
Cooler#: Tempe	rature(°C):	
Sample ID	rature(°C): Bottle Count	Bottle Type
•		
	1	
	10-11	
Cooler#: Tempe	erature(°C):	(D. W. T.
Sample ID	Bottle Count	Bottle Type
0		0.45
Completed by:	Dat	te: 9/15/15 Time: 945

Subject: RE: AML7-Jorgensen

From: Dee Gardner < dgardner@soundearthinc.com>

Date: 9/15/2015 10:52 AM

To: Mark Harris <markh@arilabs.com>

CC: "Dyer, Miles" <mdyer@JorgensenForge.com>

Mark,

Please proceed with the requested analysis. The samples were delivered straight from the field for the purpose of expedited analysis. We'll write up a qualifying statement in the report if need be. Thank you,

Dee

Deborah Gardner SoundEarth Strategies, Inc.

----Original Message----

From: Mark Harris [mailto:markh@arilabs.com] Sent: Tuesday, September 15, 2015 10:36 AM

To: Dee Gardner

Subject: AML7-Jorgensen

Dee:

FYI: The PCB samples, received today, were above the recommended temp of 6 degrees.

Let me know if you'd like us to cancel these. otherwise, we'll get these going as quickly as possible.

Mark H.

Mark Harris Project Manager Analytical Resources, Inc. 206/695-6210 markh@arilabs.com

How was your customer experience?

Please take our 5 minute online customer survey https://www.surveymonkey.com/s/WPDBVJK.

This correspondence contains confidential information from Analytical Resources, Inc. (ARI) The information contained herein is intended solely for the use of the individual(s) named above. If you are not the intended recipient, any copying, distribution, disclosure, or use of the text and/or

attached document(s) is strictly prohibited.

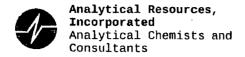
If you have received this correspondence in error, please notify sender immediately. Thank you.

Sample ID Cross Reference Report



ARI Job No: AML7 Client: Jorgensen Forge Project Event: N/A Project Name: JFOS3

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	266-N12-1+13	AML7A	15-16293	Soil	09/15/15 08:45	09/15/15 09:45
2.	266-S14-1+13	AML7B	15-16294	Soil	09/15/15 08:55	09/15/15 09:45
3.	266-W13-1+11	AML7C	15-16295	Soil	09/15/15 09:00	09/15/15 09:45
4.	266-E15-1+11	AML7D	15-16296	Soil	09/15/15 09:05	09/15/15 09:45
5.	266-B11-1+9	AML7E	15-16297	Soil	09/15/15 09:09	09/15/15 09:45



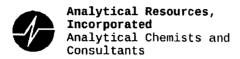
Data Reporting Qualifiers Effective 12/31/13

Inorganic Data

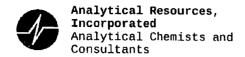
- U Indicates that the target analyte was not detected at the reported concentration
- * Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but ≥ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.



- Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
- S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (Dioxin/Furan analysis only)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated diphenyl ethers. (Dioxin/Furan analysis only)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (Dioxin/Furan analysis only)



Geotechnical Data

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- W Weight of sample in some pipette aliquots was below the level required for accurate weighting



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: MB-091515

LIMS ID: 15-16294

Matrix: Soil

Data Release Authorized:

Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 10:43 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: MB-091515

METHOD BLANK

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g Final Extract Volume: 5.00 mL Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U
37324-23-5	Aroclor 1262	20	< 20 U
11100-14-4	Aroclor 1268	20	< 20 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	96.2%
Tetrachlorometaxylene	95.0%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AML7A LIMS ID: 15-16293

Matrix: Soil

Data Release Authorized:

Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 08:14 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-N12-1+13

SAMPLE

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount: 5.27 g-dry-wt

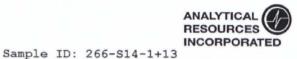
Final Extract Volume: 5.00 mL Dilution Factor: 5.00 Silica Gel: No

Percent Moisture: 25.5%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	95	< 95 U
53469-21-9	Aroclor 1242	95	< 95 U
12672-29-6	Aroclor 1248	95	< 95 U
11097-69-1	Aroclor 1254	95	570
11096-82-5	Aroclor 1260	95	280
11104-28-2	Aroclor 1221	95	< 95 U
11141-16-5	Aroclor 1232	95	< 95 U
37324-23-5	Aroclor 1262	95	< 95 U
11100-14-4	Aroclor 1268	95	< 95 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	114%
Tetrachlorometaxylene	105%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AML7B LIMS ID: 15-16294

Matrix: Soil

Data Release Authorized: WW

Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 08:35 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount: 5.17 g-dry-wt

SAMPLE

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 14.0%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	19	< 19 U
53469-21-9	Aroclor 1242	19	< 19 U
12672-29-6	Aroclor 1248	19	< 19 U
11097-69-1	Aroclor 1254	19	< 19 U
11096-82-5	Aroclor 1260	19	< 19 U
11104-28-2	Aroclor 1221	19	< 19 U
11141-16-5	Aroclor 1232	19	< 19 U
37324-23-5	Aroclor 1262	19	< 19 U
11100-14-4	Aroclor 1268	19	< 19 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	94.2%
Tetrachlorometaxylene	94.8%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AML7B LIMS ID: 15-16294

Matrix: Soil

Data Release Authorized: MW

Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 10:01 Final Extract Volume: 5.00 mL Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-S14-1+13 MATRIX SPIKE

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount: 5.19 g-dry-wt

Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 14.0%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	19	
53469-21-9	Aroclor 1242	19	< 19 []
12672-29-6	Aroclor 1248	19	< 19 U
11097-69-1	Aroclor 1254	19	< 19 U
11096-82-5	Aroclor 1260	19	
11104-28-2	Aroclor 1221	19	< 19 U
11141-16-5	Aroclor 1232	19	< 19 U
37324-23-5	Aroclor 1262	19	< 19 U
11100-14-4	Aroclor 1268	19	< 19 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	89.5%
Tetrachlorometaxylene	93.2%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AML7B LIMS ID: 15-16294

Matrix: Soil

Data Release Authorized: WWW

Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 10:22 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No MATRIX SPIKE DUP

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount: 5.19 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 14.0%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	19	
53469-21-9	Aroclor 1242	19	< 19 U
12672-29-6	Aroclor 1248	19	< 19 U
11097-69-1	Aroclor 1254	19	< 19 U
11096-82-5	Aroclor 1260	19	
11104-28-2	Aroclor 1221	19	< 19 U
11141-16-5	Aroclor 1232	19	< 19 U
37324-23-5	Aroclor 1262	19	< 19 U
11100-14-4	Aroclor 1268	19	< 19 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	91.2%
Tetrachlorometaxvlene	94.28



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AML7C LIMS ID: 15-16295

Matrix: Soil

Data Release Authorized: MW

Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 08:57 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-W13-1+11

SAMPLE

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount: 5.70 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 5.2%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	18	< 18 U
53469-21-9	Aroclor 1242	18	< 18 U
12672-29-6	Aroclor 1248	18	< 18 U
11097-69-1	Aroclor 1254	18	< 18 U
11096-82-5	Aroclor 1260	18	< 18 U
11104-28-2	Aroclor 1221	18	< 18 U
11141-16-5	Aroclor 1232	18	< 18 U
37324-23-5	Aroclor 1262	18	< 18 U
11100-14-4	Aroclor 1268	18	< 18 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	95.0%
Tetrachlorometaxylene	94.5%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AML7D LIMS ID: 15-16296

Matrix: Soil

Data Release Authorized: WW

Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 09:18 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-E15-1+11

SAMPLE

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount: 5.16 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 14.7%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	19	< 19 U
53469-21-9	Aroclor 1242	19	< 19 U
12672-29-6	Aroclor 1248	19	< 19 U
11097-69-1	Aroclor 1254	29	< 29 Y
11096-82-5	Aroclor 1260	19	220
11104-28-2	Aroclor 1221	19	< 19 U
11141-16-5	Aroclor 1232	19	< 19 U
37324-23-5	Aroclor 1262	19	< 19 U
11100-14-4	Aroclor 1268	19	< 19 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	102%
Tetrachlorometaxylene	94.28



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AML7E LIMS ID: 15-16297

Matrix: Soil

Data Release Authorized: WW Reported: 09/16/15

Date Extracted: 09/15/15 Date Analyzed: 09/16/15 09:39 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-B11-1+9

SAMPLE

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount: 5.17 g-dry-wt Final Extract Volume: 5.00 mL Dilution Factor: 5.00 Silica Gel: No

Percent Moisture: 14.1%

CAS Number	Anal	yte	LOQ	Result
12674-11-2	Aroclor	1016	97	< 97 U
53469-21-9	Aroclor	1242	97	< 97 U
12672-29-6	Aroclor	1248	97	< 97 U
11097-69-1	Aroclor	1254	97	820
11096-82-5	Aroclor	1260	97	320
11104-28-2	Aroclor	1221	97	< 97 U
11141-16-5	Aroclor	1232	97	< 97 U
37324-23-5	Aroclor	1262	97	< 97 U
11100-14-4	Aroclor	1268	97	< 97 []

Reported in µg/kg (ppb)

Decachlorobiphenyl	110%
Tetrachlorometaxylene	99.29



SW8082/PCB SOIL/SOLID/SEDIMENT SURROGATE RECOVERY SUMMARY

QC Report No: AML7-Jorgensen Forge Project: JFOS3 Matrix: Soil

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
266-N12-1+13	114%	47-120	105%	53-116	0
MB-091515	96.2%	59-115	95.0%	58-112	ő
LCS-091515	96.8%	59-115	94.8%	58-112	Ō
266-S14-1+13	94.2%	47-120	94.8%	53-116	0
266-S14-1+13 MS	89.5%	47-120	93.2%	53-116	0
266-S14-1+13 MSD	91.2%	47-120	94.2%	53-116	0
266-W13-1+11	95.0%	47-120	94.5%	53-116	0
266-E15-1+11	102%	47-120	94.2%	53-116	0
266-B11-1+9	110%	47-120	99.2%	53-116	0

Microwave (MARS) Control Limits PCBSMI

Prep Method: SW3546 Log Number Range: 15-16293 to 15-16297



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A

Page 1 of 1

Sample ID: 266-S14-1+13

MS/MSD

Lab Sample ID: AML7B LIMS ID: 15-16294

Matrix: Soil

Data Release Authorized: WW

Reported: 09/16/15

Date Extracted MS/MSD: 09/15/15

Date Analyzed MS: 09/16/15 10:01

MSD: 09/16/15 10:22 Instrument/Analyst MS: ECD7/JGR

MSD: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/15/15

Sample Amount MS: 5.19 g-dry-wt

MSD: 5.19 g-dry-wt Final Extract Volume MS: 5.0 mL

MSD: 5.0 mL Dilution Factor MS: 1.00 MSD: 1.00

Silica Gel: No

Percent Moisture: 14.0%

Analyte	S	ample	MS	Spike Added-MS	MS Recovery	MSD	Spike Added-MSD	MSD Recovery	RPD
Aroclor 1016 Aroclor 1260	-	.9 U	446 487	482 482	92.5% 101%	451 491	482 482	93.6%	1.1%

Results reported in µg/kg (ppb) RPD calculated using sample concentrations per SW846.



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A

Page 1 of 1

Lab Sample ID: LCS-091515

LIMS ID: 15-16294

Matrix: Soil

Data Release Authorized:

Reported: 09/16/15

Date Extracted: 09/15/15

Date Analyzed: 09/16/15 11:05 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: LCS-091515

LAB CONTROL

QC Report No: AML7-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	471	500	94.2%
Aroclor 1260	519	500	104%

PCB Surrogate Recovery

Decachlorobiphenyl	96.8%
Tetrachlorometaxylene	94.8%

Results reported in µg/kg (ppb)

AML7MBS1

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AML7

Project: JFOS3

Lab Sample ID: AML7MBS1

Lab File ID: 09161512

Date Extracted: 09/15/15

Matrix: SOLID

Date Analyzed: 09/16/15

Instrument ID: ECD7

Time Analyzed: 1043

GC Columns: ZB5/ZB35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
	=======================================	========	=======
01	266-N12-1+13	AML7A	09/16/15
02	266-S14-1+13	AML7B	09/16/15
03	266-W13-1+11	AML7C	09/16/15
04	266-E15-1+11	AML7D	09/16/15
05	266-B11-1+9	AML7E	09/16/15
06	266-S14-1+13 MS	AML7BMS	09/16/15
07	266-S14-1+13 MSD	AML7BMSD	09/16/15
08	AML7LCSS1	AML7LCSS1	09/16/15

ALL RUNS ARE DUAL COLUMN

6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Calibration Date: 08/03/15

SURROGATES

 	RT WIN	LVL1	LVL2	•	,	•	LVL6	3	
DCB	6.17- 6.37 14.74-14.94	1.7111	1.7198	0.5438	0.5434	0.5583	0.5704	0.5312	7.6 12.4

roc]	or-10	16	LVL1	- 1	LVL2	-	LVL3		LVL4		LVL5	-	LVL6	- 1	MEAN	-	%RSD
Peak	RT	WIN	.02	1	0.05	1					0.5	•		•		•	R^2
1	8.18-	8.38	0.0127	·	0.0137						0.0125					1	6.0
2	8.67-	8.87	0.0388	ĺ	0.0418	Ì	0.0425	-	0.0396	١	0.0390	1	0.0384	1	0.0400	1	4.3
3	8.96-	9.16	0.0123	١	0.0144	-	0.0149		0.0140	1	0.0138	1	0.0134	-	0.0138		6.5
4	9.75-	9.95	0.0139	-	0.0149	- 1	0.0160	1	0.0148	-	0.0146	1	0.0141	- [0.0147	-	4.9

AROCLOR AVERAGE %RSD = 5.4

Aroclor-1260 Peak RT WIN	LVL1 .02	LVL2	0.1	.25	LVL5 0.5	•	•	%RSD R^2
1 12.31-12.51		•	0.0511	0.0511	0.0472	0.0497	0.0502	3.9
2 12.98-13.18 3 13.36-13.56		0.1509	•	•	0.1585	•	0.1551	9.6
4 13.46-13.66 5 13.86-14.06		0.0404	'	•	0.0400	•	0.0403	6.3

AROCLOR AVERAGE %RSD = 6.9

6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 08/03/15

SURROGATES

 RT WIN	LVL1	LVL2	LVL3	LVL4	LVL5	LVL6	MEAN	%RSD
TCX 6.56- 6.76 DCB 15.22-15.42	0.97 4 9 1.1059	1.0337 1.0972	1.0794 1.1143	1.0345 1.0244	1.0222	0.9958 0.9886	1.0234 1.0556	3.5

roclor-1016	LVL1	-	LVL2	١	LVL3	1	LVL4		LVL5	1	LVL6	MEAN	%RS
eak RT WIN	.02	.	0.05	•		•		•		•		 	•
1 8.67- 8.87	0.0481		0.0478										
2 9.38- 9.58	0.0957		0.0955	-	0.0955	- [0.0864	Į	0.0833	1	0.0792	0.0893	8.
3 9.80-10.00	0.0250		0.0256		0.0255	-	0.0230	1	0.0217	l	0.0205	0.0236	9.
4 10.35-10.55	0.0339		0.0347	- [0.0339	- 1	0.0302	- 1	0.0285	İ	0.0267	0.0313	10.

AROCLOR AVERAGE %RSD = 10.0

 Aroclor-1260	- .	T 1/T 1	 I	T 17T 2	·		 I	T 1/T A	 I	TM 5	 I	LVL6	MEAN	 \ %RSD	
1			•		,				,					,	
Peak RT W	IN	. 02		0.05	- 1	0.1	- [. 25		0.5	- 1	1.0		R^2	2
												. 			
1 12.90-13	.10	0.0940	1	0.0922	}	0.0897	- [0.0799	- 1	0.0745	1	0.0713	0.0836	11.5	;
2 13.56-13	.76	0.1992	-	0.2005		0.1998	-	0.1867	-	0.1792		0.1768	0.1904	5.7	,
3 13.99-14	.19	0.0651		0.0649	-	0.0637	-	0.0574	ļ	0.0536		0.0519	0.0594	10.0)
4 14.04-14	. 24	0.1332		0.1340	1	0.1333	-	0.1212	1	0.1155		0.1129	0.1250	7.7	,
	-									. 					

AROCLOR AVERAGE %RSD = 8.7

6G 8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

		_ 	
	Aroclo	r-1221	Cal
Peak	RT	RT WIN	Factor
1	4.946	4.85- 5.05	0.00300
2		6.82- 7.02	0.00486
3 	7.047	6.95- 7.15	0.01455
	Aroclo	r-1232	Cal
Peak	RT	RT WIN	Factor
1	4.946	4.85- 5.05	0.00172
2	7.046		0.00980
3	8.759 9.658	8.66- 8.86 9.56- 9.76	0.01696
	Aroclo	 r-1242	
			Cal
Peak	RT	RT WIN	Factor
1	8.764	8.66- 8.86	0.03076
2	9.062 10.297	8.96- 9.16 10.20-10.40	0.01109
	10.297	10.20-10.40	0.01403
	Aroclo	r-1248	
	~~~	DO LITH	Cal
Peak	RT	RT WIN	Factor
1	9.406	9.31- 9.51	0.00882
2	9.849	9.75- 9.95 10.20-10.40	0.02086
_	10.299	10.20-10.40	0.02446

#### 6G 8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

Aroclo	or-1254	 
   Peak RT	RT WIN	Cal Factor
1 10.290 2 10.612 3 10.995 4 11.132 5 11.849	11.03-11.23	0.01523 0.02246 0.01795 0.03393 0.02473
Aroclo	pr-1262	Cal Factor
1 12.408 2 13.085 3 13.461 4 13.625 5 14.171	12.31-12.51 12.99-13.19 13.36-13.56	0.10383 0.27054 0.07188 0.12224 0.10332
Aroclo	er-1268 RT WIN	   Cal   Factor
1 13.561 2 13.623 3 13.949 4 14.555	13.52-13.72 13.85-14.05	0.24308 0.23035 0.20684 0.63060

#### 6G 8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

	Aroclo	r-1221	
Peak	RT	RT WIN	Cal   Factor
_	5.744	5.64- 5.84	0.00821
2	7.471	7.37- 7.57	0.01368
3	7.773	7.67- 7.87	0.00799
4	7.913 	7.81- 8.01	0.02412
	Aroclo	r-1232	<u> </u>
_ ,			Cal
Peak	RT	RT WIN	Factor
1	5.744	5.64- 5.84	0.00506
2	7.912	7.81- 8.01	0.01726
3	8.762	8.66- 8.86	0.01985
4	9.890	9.79- 9.99	0.01037
	Aroclo	r-1242	 
			Cal
Peak	RT	RT WIN	Factor
1	8.773	8.67- 8.87	0.03253
2	9.479	9.38- 9.58	0.06762
	10.901	10.80-11.00	0.02930
4 :	11.342 	11.24-11.44	0.02943
	Aroclo	r-1248	 
			Cal
Peak	RT	RT WIN	Factor
	9.473	9.37- 9.57	0.04417
	10.448		0.03719
	10.983		0.03822
4	11.344	11.24-11.44	0.04818

# 6G 8082 INITIAL CALIBRATION OF SINGLE POINT PCBs

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

	<b>_</b>		
	Aroclo	r-1254	
			Cal
Peak	RT	RT WIN	Factor
_	11.200	11.10-11.30	0.04173
! . =	11.298	11.20-11.40	0.01974
· -	11.738	11.64-11.84	0.03299
i _	11.891		0.06503
5	12.672	12.57-12.77	0.04305
	Aroclo		1
!	Arocio	1-1202	Cal
l Doole	RT	RT WIN	Factor
reak	. K1	KI WIN	ractor
1	12.993	12.89-13.09	0.15518
2	13.428	13.33-13.53	0.14324
!	13.656	13.56-13.76	0.29125
1	14.091		0.12507
5	14.686	14.59-14.79	0.09594
	Aroclo	r-1268	
			Cal
Peak	RT	RT WIN	Factor
1	14.090		0.21797
2	14.144	14.04-14.24	0.20396
	14.454	14.35-14.55	0.16487
4	15.033	14.93-15.13	0.46628

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Lab Standard ID: AR1254 Time Analyzed: 0710

COMPOUND/PEAK NO.	RT	FROM		_ i		
	İ	PROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	======	======	=====	=======	=======	=====
Aroclor-1254-1	10.29	10.19	10.39	251.8	250.0	0.7
Aroclor-1254-2	10.61	10.51	10.71	277.3	250.0	10.9
Aroclor-1254-3	10.99	10.89	11.09	289.2	250.0	15.7
Aroclor-1254-4	11.13	11.03	11.23	287.1	250.0	14.8
Aroclor-1254-5	11.85	11.75	11.95	271.7	250.0	8.7

AROCLOR AVG: 275.4 CAL %D = 10.2

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/16/15

Lab Standard ID: AR1660

Time Analyzed :0731

		RT W	MDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
	=====	=====	=====	=======	=======	=====
Aroclor-1016-1	8.26	8.18	8.38	243.9	250.0	-2.4
Aroclor-1016-2	8.75	8.67	8.87	241.9	250.0	-3.2
Aroclor-1016-3	9.05	8.96	9.16	246.8	250.0	-1.3
Aroclor-1016-4	9.84	9.75	9.95	250.6	250.0	0.2
		•		'	•	•

AROCLOR AVG: 245.8 CAL %D = -1.7

Date Analyzed:09/16/15

Lab Standard ID: AR1660

Time Analyzed: 0731

	RT WINDOW		CALC	NOM	
RT	FROM	TO	TRUOMA	TNUOMA	%D
			(ng)	(ng)	
======	=====	=====	======	======	=====
12.40	12.31	12.51	274.1	250.0	9.6
13.08	12.98	13.18	269.4	250.0	7.8
13.45	13.36	13.56	268.4	250.0	7.3
13.55	13.46	13.66	264.1	250.0	5.6
13.96	13.86	14.06	267.3	250.0	6.9
	12.40 13.08 13.45 13.55	RT FROM  12.40 12.31 13.08 12.98 13.45 13.36 13.55 13.46	RT FROM TO  12.40 12.31 12.51 13.08 12.98 13.18 13.45 13.36 13.56 13.55 13.46 13.66	RT FROM TO AMOUNT (ng)	RT FROM TO AMOUNT (ng) (ng)

AROCLOR AVG: 268.7 CAL %D = 7.5

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Time Analyzed: 1209 Lab Standard ID: AR1248

	RT W	INDOW	CALC	MOM	
RT	FROM	TO	THUOMA	AMOUNT	%D
1			(ng)	(ng)	
-   =====	=====	=====	======	=======	=====
9.41	9.31	9.51	274.1	250.0	9.6
9.85	9.75	9.95	276.8	250.0	10.7
10.30	10.20	10.40	272.5	250.0	9.0
10.54	10.44	10.64	280.8	250.0	12.3
	9.41 9.85 10.30	RT FROM  9.41 9.31 9.85 9.75 10.30 10.20	9.41 9.31 9.51 9.85 9.75 9.95 10.30 10.20 10.40	RT FROM TO AMOUNT (ng)  9.41 9.31 9.51 274.1  9.85 9.75 9.95 276.8  10.30 10.20 10.40 272.5	RT FROM TO AMOUNT AMOUNT (ng) (ng)  9.41 9.31 9.51 274.1 250.0  9.85 9.75 9.95 276.8 250.0  10.30 10.20 10.40 272.5 250.0

AROCLOR AVG: 276.0 CAL %D = 10.4

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Lab Standard ID: AR1660 Time Analyzed: 1230

	RT W	INDOW	CALC	NOM	
RT	FROM	TO	AMOUNT (ng)	AMOUNT (nq)	₹D
= =====	=====	=====	======	=======	=====
8.28	8.18	8.38	247.7	250.0	-0.9
8.77	8.67	8.87	246.2	250.0	-1.5
9.06	8.96	9.16	251.3	250.0	0.5
9.85	9.75	9.95	254.7	250.0	1.9
	8.28 8.77 9.06	RT FROM  8.28 8.18 8.77 8.67 9.06 8.96		RT FROM TO AMOUNT (ng)  = ===== ==== ==== ===== ============	RT FROM TO AMOUNT AMOUNT (ng) (ng)  = ===== = ==== ==== ===== ==========

AROCLOR AVG: 250.0 CAL %D = 0.0

Date Analyzed :09/16/15

Lab Standard ID: AR1660 Time Analyzed :1230

		RT WINDOW		CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	TUNOMA	%D
		!		(ng)	(ng)	
<b>=============</b>	=====	=====	=====	======	======	=====
Aroclor-1260-1	12.41	12.31	12.51	274.5	250.0	9.8
Aroclor-1260-2	13.08	12.98	13.18	269.8	250.0	7.9
Aroclor-1260-3	13.46	13.36	13.56	268.9	250.0	7.6
Aroclor-1260-4	13.56	13.46	13.66	264.7	250.0	5.9
Aroclor-1260-5	13.96	13.86	14.06	268.0	250.0	7.2

AROCLOR AVG: 269.2 CAL %D = 7.7

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Lab Standard ID: AR1254 Time Analyzed: 0710

		RT W	INDOW	CALC	МОМ	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	TRUOMA	%D
				(ng)	(ng)	
	======	=====	=====		=======	=====
Aroclor-1254-1	11.20	11.10	11.30	249.8	250.0	-0.1
Aroclor-1254-2	11.30	11.20	11.40	254.3	250.0	1.7
Aroclor-1254-3	11.74	11.64	11.84	255.5	250.0	2.2
Aroclor-1254-4	11.89	11.79	11.99	249.5	250.0	-0.2
Aroclor-1254-5	12.67	12.57	12.77	245.8	250.0	-1.7

AROCLOR AVG: 251.0 CAL %D = 0.4

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed :09/16/15

Lab Standard ID: AR1660

Time Analyzed: 0731

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
	=====	======	=====	=======	=======	=====
Aroclor-1016-1	8.76	8.67	8.87	239.2	250.0	-4.3
Aroclor-1016-2	9.47	9.38	9.58	243.7	250.0	-2.5
Aroclor-1016-3	9.89	9.80	10.00	247.3	250.0	-1.1
Aroclor-1016-4	10.44	10.35	10.55	187.9	250.0	-24.8
			•	,	•	•

AROCLOR AVG: 229.5 CAL D = -8.2

Date Analyzed :09/16/15

Lab Standard ID: AR1660

Time Analyzed:0731

		RT WINDOW		CALC	MOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=======================================	=====	=====	=====	======	======	=====
Aroclor-1260-1	12.99	12.90	13.10	226.6	250.0	-9.4
Aroclor-1260-2	13.65	13.56	13.76	228.4	250.0	-8.6
Aroclor-1260-3	14.09	13.99	14.19	222.2	250.0	-11.1
Aroclor-1260-4	14.14	14.04	14.24	225.6	250.0	-9.8

AROCLOR AVG: 225.7 CAL %D = -9.7

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Lab Standard ID: AR1248 Time Analyzed :1209

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
	======	=====	=====	======	=======	=====
Aroclor-1248-1	9.47	9.37	9.57	247.3	250.0	-1.1
Aroclor-1248-2	10.45	10.35	10.55	197.8	250.0	-20.9
Aroclor-1248-3	10.98	10.88	11.08	251.5	250.0	0.6
Aroclor-1248-4	11.34	11.24	11.44	252.2	250.0	0.9
		•	•	•	•	•

AROCLOR AVG: 237.2 CAL %D = -5.1

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Lab Standard ID: AR1660

Time Analyzed :1230

FR	OM   ===	TO	AMOUNT (ng)	AMOUNT (ng)	%D    =====
:= ===	 === =	=====	(ng)	(ng)	  =====
= ===	=== =	=====	======	: ======	=====
i					
77   8	.67	8.87	237.9	250.0	-4.8
8 8	.38	9.58	243.0	250.0	-2.8
9 0	.80	10.00	247.4	250.0	-1.0
5   10	.35	10.55	190.9	250.0	-23.6
4	48 9 90 9	48 9.38 90 9.80	48 9.38 9.58 90 9.80 10.00	48 9.38 9.58 243.0 90 9.80 10.00 247.4	48     9.38     9.58     243.0     250.0       90     9.80     10.00     247.4     250.0

AROCLOR AVG: 229.8 CAL %D = -8.1

Date Analyzed:09/16/15

Lab Standard ID: AR1660

Time Analyzed :1230

		RT W	MDOM	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	TRUOMA	TRUOMA	%D
				(ng)	(ng)	
=======================================	======	=====	=====	======	=======	=====
Aroclor-1260-1	13.00	12.90	13.10	224.6	250.0	-10.2
Aroclor-1260-2	13.66	13.56	13.76	226.7	250.0	-9.3
Aroclor-1260-3	14.09	13.99	14.19	223.7	250.0	-10.5
Aroclor-1260-4	14.14	14.04	14.24	226.5	250.0	-9.4
	•		•			•

AROCLOR AVG: 225.4 CAL %D = -9.8

#### FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AML7 Project: JFOS3

GC Column: ZB5 ID: 0.53(mm) Instrument ID: ECD7

Init. Calib. Date: 08/03/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

			1		IS1		IS2	
			Ì		AREA	RT	AREA	RT
			======		=======	======		
			ICAL	MIDPT	6328212	3.263	5068453	15.102
			UPPER	LIMIT	12656424	3.363	10136906	15.202
			LOWER	LIMIT	3164106	3.163	2534226	15.002
			İ		j			i
	CLIENT	LAB	DATE		IS1		IS2	
ĺ	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
Ì	========			=====	=======	======	========	======
01	ZZZZZ	ZZZZZ	08/03/15	1716	6222621	3.258	5047030	15.102
02		0.25PPMAR166	08/03/15	1737	6328212	3.263	5068453	15.102
03		0.02PPMAR166	08/03/15	1758	6326177	3.262	5154907	15.102
04		0.05PPMAR166	08/03/15	1820	6210580	3.264	5033371	15.102
05		1PPMAR1660	08/03/15	1841	6160991	3.266	4985647	15.103
06		0.1PPMAR1660	08/03/15	1902	6344317	3.268	5407220	15.103
07		0.5PPMAR1660	08/03/15	1924	6159955	3.267	5303929	15.103
08		AR1242	08/03/15	1945	6219986	3.265	5066767	15.103
09		AR1248	.08/03/15	2007	6249050	3.265	5356854	15.103
10		AR1254	08/03/15	2028	6326911	3.267	5032449	15.103
11		AR2162	08/03/15	2049	6246099	3.266	4938617	15.103
12		AR3268	08/03/15	2111	6259531	3.265	5003661	15.103
13	ZZZZZ	ZZZZZ	08/03/15	2132	6338133	3.267	5037306	15.103
14	ZZZZZ	ZZZZZ	08/03/15	2153	6038309	3.262	5048403	15.103
15	ZZZZZ	ZZZZZ	08/03/15	2214	6208035	3.265	5032536	15.103
16	ZZZZZ	ZZZZZ	08/03/15	2236	6278544	3.265	5100405	15.103
17	ZZZZZ	ZZZZZ	08/03/15	2257	6251565	3.264	5061467	15.103
18	ZZZZZ	ZZZZZ	08/03/15	2318	6317415	3.264	5061451	15.102
19		AR1254	09/16/15	0710	7990804	3.252	6207401	15.094
20		AR1660	09/16/15	0731	7366290	3.261	5462240	15.095
21	266-N12-1+13	AML7A	09/16/15	0814	7474305	3.276	5798033	15.096
22	266-S14-1+13	AML7B	09/16/15	0835	7550604	3.277	5736206	15.096
23	266-W13-1+11	AML7C	09/16/15	0857	7740105	3.277	5909287	15.096
	266-E15-1+11	AML7D	09/16/15	0918	7604522	3.277	5883792	15.096
25	266-B11-1+9	AML7E	09/16/15	0939	7541461	3.277	5778504	15.096
26	266-S14-1+13	AML7BMS	09/16/15	1001	7737559	3.278	5842768	15.097
27	266-S14-1+13	AML7BMSD	09/16/15	1022	7681627	3.281	5866888	15.097
28	AML7MBS1	AML7MBS1	09/16/15	1043	7262802	3.280	5610540	15.097
29	AML7LCSS1	AML7LCSS1	09/16/15	1105	7630648	3.280	5897148	15.097
30		AR1248	09/16/15	1209	8557493	3.276	6474352	15.096
31		AR1660	09/16/15	1230	7391821	3.278	5586486	15.097
			l	l	l	l		

#### FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AML7

Project: JFOS3

GC Column: ZB35 ID: 0.53(mm)

Instrument ID: ECD7

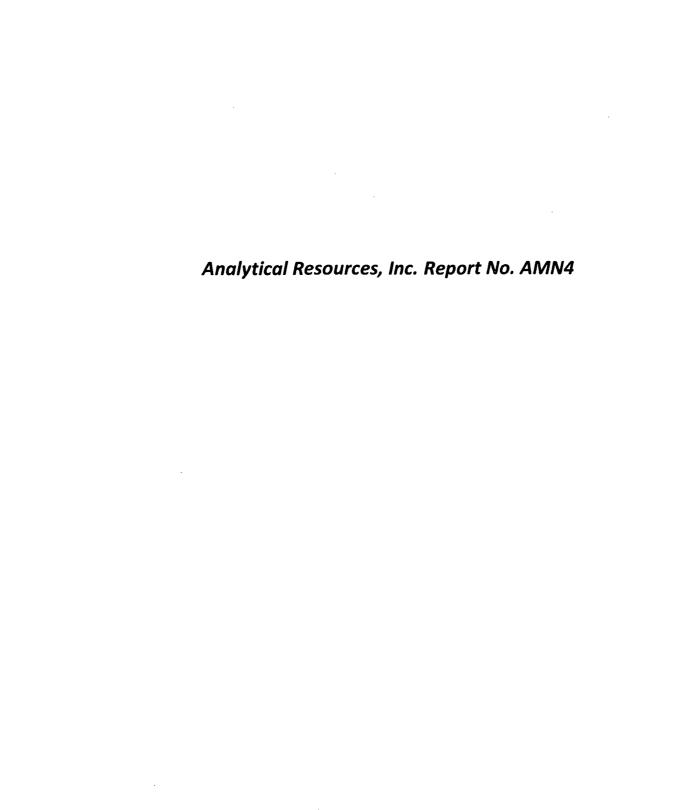
Init. Calib. Date: 08/03/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

					IS1		IS2	
			i		AREA	RT	AREA	RT
			======	=====	=======	======	=======	======
			ICAL	MIDPT	12901249	4.365	7598346	15.906
			UPPER	LIMIT	25802498	4.465	15196692	16.006
			LOWER	LIMIT	6450624	4.265	3799173	15.806
	_							
	CLIENT	LAB	DATE		IS1		IS2	
	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
	=======================================		=======		=======	======	=======	======
01	ZZZZZ	ZZZZZ	08/03/15	1716	12615423	4.360	7577981	15.906
02		0.25PPMAR166	08/03/15	1737	12901249	4.365	7598346	15.906
03		0.02PPMAR166	08/03/15	1758	12889538	4.366	7674080	15.906
04		0.05PPMAR166		1820	12701605	4.367	7596138	15.906
05		1PPMAR1660	08/03/15	1841	12722963	4.369	7648810	15.907
06		0.1PPMAR1660		1902	13013744	4.371	7786984	15.907
07		0.5PPMAR1660	08/03/15	1924	12706249	4.370	7776969	15.907
08		AR1242	08/03/15	1945	12825517	4.369	7804063	15.906
09		AR1248	08/03/15	2007	12932061	4.369	7871936	15.906
10		AR1254	08/03/15	2028	13098041	4.370	7793570	15.907
11		AR2162	08/03/15	2049	12808024	4.369	7735916	15.907
12		AR3268	08/03/15	2111	12831845	4.369	7828166	15.907
13	ZZZZZ	ZZZZZ	08/03/15	2132	13048327	4.369	7840797	15.907
14	ZZZZZ	ZZZZZ	08/03/15	2153	12451023	4.366	7728754	15.907
15	ZZZZZ	ZZZZZ	08/03/15	2214	12732082	4.367	7695088	15.907
16	ZZZZZ	ZZZZZ	08/03/15	2236	12892489	4.368	7804248	15.906
17	ZZZZZ	ZZZZZ	08/03/15	2257	12666986	4.367	7848857	15.907
18	ZZZZZ	ZZZZZ	08/03/15	2318	12781896	4.367	7841933	15.907
19		AR1254	09/16/15	0710	13466058	4.355	8335929	15.904
20		AR1660	09/16/15	0731	12624851	4.369	7778737	15.904
21	266-N12-1+13	AML7A	09/16/15	0814	13147937	4.385	8352193	15.906
22	266-S14-1+13	AML7B	09/16/15	0835	13035043	4.387	8274155	15.906
23	266-W13-1+11	AML7C	09/16/15	0857	13614674	4.387	8337711	15.906
24	266-E15-1+11	AML7D	09/16/15	0918	13440354	4.387	8044619	15.906
25	266-B11-1+9	AML7E	09/16/15	0939	13411540	4.388	8167613	15.906
26	266-S14-1+13	AML7BMS	09/16/15	1001	13649840	4.389	8665907	15.906
27	266-S14-1+13	AML7BMSD	09/16/15	1022	13586001	4.390	8398690	15.906
28	AML7MBS1	AML7MBS1	09/16/15	1043	13072974	4.389	8146448	15.906
29	AML7LCSS1	AML7LCSS1	09/16/15	1105	13626900	4.390	8389543	15.906
30		AR1248	09/16/15	1209	15205120	4.386	9776066	15.907
31		AR1660	09/16/15	1230	13284494	4.388	8363407	15.907
				l	l	l		

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl



SoundEarth Strategies, Inc.



17 September 2015

Dee Gardner Sound Earth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

RE: JFOS3

ARI Job No.: AMN4

Dear Dee:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. received two soil samples on September 16, 2015. The samples were analyzed for PCBs as requested.

These analyses proceeded without incident of note.

If you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris Project Manager 206/695-6210

markh@arilabs.com

cc: Miles Dyer, Jorgensen Forge file AMN4

Enclosures

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number:		Requested:			Page:	1	of	1				Analytic	cal Resources, Incorporated cal Chemists and Consultants outh 134th Place, Suite 100
ARI Client Company: Jo RG ENSE	N FORGE	Phone: = Copp. 20	6.762.1	100	Date: 9/15/16   Ice Present? YeS			25			Tukwila, WA 98168 206-695-6200 206-695-6201 (fax)		
Client Contact: MILES DYER	_				No. of Coolers:	1	Coole	r s: 4.	1				ilabs.com
Client Project Name: JF053								Analysis I	Requested				Notes/Comments
Client Project #:	Samplers:	J. LOEF	FLER		s by 8082								
Sample ID	Date	Time	Matrix	No. Containers	PCBS EPA 8							*,	
CMP12-B08-1+06	9/15/15	1515	SOIL	1	×								
CMP24-B09-1+05	9/15/15	1520	SOIL	1	×								
				1	11								
					JU								
CC: DEE GARDNER AT	Relinquished by: (Signature)	Toutes	_	Received by: (Signature)	)			(Signature)	by:			Received by: (Signature)	
SOUND EARTH	Printed Name:	ATHAN LO	EFFLER	Printed Name:	ris,	Ajwes	(1	Printed Nam	9:			Printed Name	s:
dgardner@soundearth inc.com	Company:	DEART		Company:		1.		Company:				Company:	
inc.com	Date & Time:	s @ 08°		Date & Time:		0832	>	Date & Time:				Date & Time:	

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or cosigned agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.



# **Cooler Receipt Form**

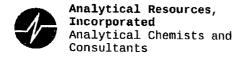
ARI Client: Jurgengen I	Forge	Project Name:			
COC No(s):	NA	Delivered by: Fed-Ex UPS Cour	rier Hand Deli	vered Other:	
Assigned ARI Job No. AMN	4	Tracking No:			NA
Preliminary Examination Phase:		Tracking No.			
Were intact, properly signed and da	ated custody seals attached to	the outside of to cooler?		YES	(NO)
Were custody papers included with	the cooler?			YES	NO
Were custody papers properly filled				YES	NO
Temperature of Cooler(s) (°C) (rec		mistry) 4. /			
If cooler temperature is out of comp	pliance fill out form 00070F		Temp Gun II		565
Cooler Accepted by:	cA	Date: 9 - 16 - 15 Time	0838		
		and attach all shipping documents	U		
Log-In Phase:					
Was a temperature blank included	in the cooler?			YES	No
The second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second second secon		Wet Ice Gel Packs Baggies Foam	Block Paper		0
Was sufficient ice used (if appropri			NA	₩2s	NO
Were all bottles sealed in individua				YES	ONO
Did all bottles arrive in good condit				YES	NO
				XE8	NO
Did the number of containers listed	on COC match with the numb	per of containers received?		YES	NO
Did all bottle labels and tags agree	with custody papers?			VES	NO
Were all bottles used correct for the	e requested analyses?			YES	NO
Do any of the analyses (bottles) re-	quire preservation? (attach pre	eservation sheet, excluding VOCs)	CNA	YES	NO
Were all VOC vials free of air bubb	les?		LNA	YES	NO
Was sufficient amount of sample s	ent in each bottle?			(YES	NO
Date VOC Trip Blank was made at	ARI		NA		
Was Sample Split by ARI: NA	YES Date/Time:	Equipment:		Split by:_	
Samples Logged by:	Date	e: 9-16-15 Time:	. 20	B	
Samples Logged by.		er of discrepancies or concerns **	64.		
	Houry Project manage	er or discrepancies or concerns			
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	San	nple ID on C	00
Sample ib on Bottle	Sample ID on COC	Sample ID on Bottle	Sail	inpie ib on c	00
Additional Notes, Discrepancies	s, & Resolutions:				
By: Date	e:				
Small Air Bubbles Peabubble	Dallor Mi Banning	Small → "sm" (<2 mm)			
- 2mm 2-4 mm	>4 mm	Peabubbles → "pb" (2 to < 4 mm)			
	9 9 9	Large → "lg" (4 to < 6 mm)			
		Headspace → "hs" (>6 mm)			

## Sample ID Cross Reference Report



ARI Job No: AMN4
Client: Jorgensen Forge
Project Event: N/A
Project Name: JFOS3

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	CMP12-B08-1+06	AMN 4 A	15-16384		09/15/15 15:15	09/16/15 08:38
2.	CMP24-B09-1+05	AMN 4 B	15-16385		09/15/15 15:20	09/16/15 08:38



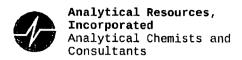
# Data Reporting Qualifiers Effective 12/31/13

### **Inorganic Data**

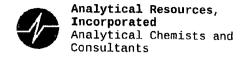
- U Indicates that the target analyte was not detected at the reported concentration
- Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but ≥ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

### **Organic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.



- Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
- Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic Interference. The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (Dioxin/Furan analysis only)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated diphenyl ethers. (Dioxin/Furan analysis only)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (Dioxin/Furan analysis only)



### **Geotechnical Data**

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- W Weight of sample in some pipette aliquots was below the level required for accurate weighting



ORGANICS ANALYSIS DATA SHEET PSDDA PCB by GC/ECD Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: MB-091615

LIMS ID: 15-16384

Matrix: Soil

Data Release Authorized:

Reported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/16/15 18:30 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: MB-091615 METHOD BLANK

QC Report No: AMN4-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g Final Extract Volume: 5.00 mL Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

12674-11-2 Aroclor 1016 20 < 2 53469-21-9 Aroclor 1242 20 < 2 12672-29-6 Aroclor 1248 20 < 2 11097-69-1 Aroclor 1254 20 < 2 11096-82-5 Aroclor 1260 20 < 2 11104-28-2 Aroclor 1221 20 < 2	:
53469-21-9       Aroclor 1242       20       < 2         12672-29-6       Aroclor 1248       20       < 2         11097-69-1       Aroclor 1254       20       < 2         11096-82-5       Aroclor 1260       20       < 2	[]
11097-69-1 Aroclor 1254 20 < 2 11096-82-5 Aroclor 1260 20 < 2	-
11096-82-5 Aroclor 1260 20 < 2	U
11101 00 0	-
11104-28-2 Aroclor 1221 20 < 2	U
	U
11141-16-5 Aroclor 1232 20 < 2	U
37324-23-5 Aroclor 1262 20 < 2	U
11100-14-4 Aroclor 1268 20 < 2	U

Reported in µg/kg (ppb)

Decachlorobiphenyl	94.8%
Tetrachlorometaxylene	99.58

ORGANICS ANALYSIS DATA SHEET PSDDA PCB by GC/ECD

Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AMN4A LIMS ID: 15-16384

Matrix: Soil

Data Release Authorized: MAReported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/16/15 19:13 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: CMP12-B08-1+06

SAMPLE

QC Report No: AMN4-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/16/15

Sample Amount: 5.43 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 23.0%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	18	< 18 U
53469-21-9	Aroclor 1242	18	< 18 U
12672-29-6	Aroclor 1248	18	< 18 U
11097-69-1	Aroclor 1254	18	< 18 U
11096-82-5	Aroclor 1260	18	< 18 U
11104-28-2	Aroclor 1221	* 18	< 18 U
11141-16-5	Aroclor 1232	.18	< 18 U
37324-23-5	Aroclor 1262	18	< 18 U
11100-14-4	Aroclor 1268	1.8	< 18 []

Reported in µg/kg (ppb)

Decachlorobiphenyl	85.0%
Tetrachlorometaxylene	92.5%

ORGANICS ANALYSIS DATA SHEET PSDDA PCB by GC/ECD Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AMN4B LIMS ID: 15-16385

Matrix: Soil

Data Release Authorized:

Reported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/16/15 19:34 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: CMP24-B09-1+05 SAMPLE

QC Report No: AMN4-Jorgensen Forge Project: JFOS3

Date Sampled: 09/15/15 Date Received: 09/16/15

Sample Amount: 5.11 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 27.2%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	59	< 59 Y
11097-69-1	Aroclor 1254	20	360
11096-82-5	Aroclor 1260	20	66
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U
37324-23-5	Aroclor 1262	20	< 20 U
11100-14-4	Aroclor 1268	20	< 20 U

Reported in µg/kg (ppb)

Decachlorobiphenyl	78.0%
Tetrachlorometaxylene	84.2%



### SW8082/PCB SOIL/SOLID/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: AMN4-Jorgensen Forge Project: JFOS3

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-091615 LCS-091615 CMP12-B08-1+06 CMP24-R09-1+05	95.8% 85.0%	40-133 40-133 40-133	110% 92.5%	53-120 53-120 53-120 53-120	0 0 0

Microwave (MARS) Control Limits PCBSMP

Prep Method: SW3546

Log Number Range: 15-16384 to 15-16385



## ORGANICS ANALYSIS DATA SHEET PSDDA PCB by GC/ECD

Page 1 of 1

Lab Sample ID: LCS-091615 LIMS ID: 15-16384

Matrix: Soil

Data Release Authorized: MW

Reported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/16/15 18:52 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: LCS-091615

LAB CONTROL

QC Report No: AMN4-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	538	500	108%
Aroclor 1260	497	500	99.4%

#### PCB Surrogate Recovery

Decachlorobiphenyl	95.8%
Tetrachlorometaxylene	110%

Results reported in µg/kg (ppb)

# PCB METHOD BLANK SUMMARY

BLANK NO.

AMN4MBS1

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

Lab Sample ID: AMN4MBS1

Lab File ID: 09161530

Date Extracted: 09/16/15

Matrix: SOLID

Date Analyzed: 09/16/15

Instrument ID: ECD7

Time Analyzed: 1830

GC Columns: ZB5/ZB35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
02	======================================	======= AMN4LCSS1 AMN4A AMN4B	09/16/15 09/16/15 09/16/15 09/16/15

ALL RUNS ARE DUAL COLUMN

## 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMN4 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

RT WIN	LVL1	LVL2	•		LVL4			•				•	
TCX 6.17- 6.37   DCB 14.74-14.94	1.7111	1.7198	0.5	138 321	0.5434	0   1	.5583 .2882	0	).5704 L.3482		0.5312 1.4921	1	7.6 12.4

Arocl	lor-101	L6	LVL1		LVL2		LVL3	1	LVL4		LVL5		LVL6	1	MEAN		*RSD
Peak	RT	MIN	.02	I	0.05	1	0.1	I	.25	۱	0.5	1	1.0	١		İ	R^2
1	8.17-	8.37	0.0127	1	0.0137	1	0.0140		0.0130	 	0.0125	 	0.0119	1	0.0129		6.0
2	8.66-	8.86	0.0388	- [	0.0418		0.0425	-	0.0396	-	0.0390	-	0.0384	-	0.0400	1	4.3
3	8.96-	9.16	0.0123	- [	0.0144	- 1	0.0149	1	0.0140	-1	0.0138	-	0.0134	1	0.0138		6.5
4	9.75-	9.95	0.0139	-	0.0149		0.0160	- 1	0.0148	- 1	0.0146	- 1	0.0141	-1	0.0147	- 1	4.9

AROCLOR AVERAGE %RSD = 5.4

Aroclor	-1260	LVL1		LVL2	-	LVL3	- 1	LVL4	- 1	LVL5	-	LVL6		MEAN		%RSD
Peak	RT WIN	.02		0.05		0.1	İ	.25	1	0.5	1	1.0				R^2
1 12.	30-12.50	0.0491		0.0528		0.0511	1	0.0511		0.0472		0.0497	1	0.0502	1	3.9
2 12.	98-13.18	0.1300	1	0.1509	- 1	0.1533	-	0.1635		0.1585	1	0.1747		0.1551	1	9.6
3 13.	35-13.55	0.0548	-	0.0622	- 1	0.0625	-	0.0650	1	0.0614	1	0.0659	-	0.0620		6.4
4 13.	45-13.65	0.0356	-	0.0404	-	0.0408	-	0.0424	1	0.0400	-	0.0425		0.0403		6.3
5 13.	86-14.06	0.0162	1	0.0197	- 1	0.0199	1	0.0205	- 1	0.0194	-1	0.0207	1	0.0194	-	8.4

AROCLOR AVERAGE %RSD = 6.9

## 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMN4 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

 	RT WIN	LVL1	_	LVL3	LVL4	LVL5	LVL6	MEAN	%RSD
•	6.55- 6.75  15.22-15.42		•	1.0794   1.1143	1.0345	1.0222	0.9958   0.9886	1.0556	3.5

Aroclor-1016	LVL1	1	LVL2	- 1	LVL3		LVL4	- [	LVL5	LVL	6	MEAN	*RSD
Peak RT WIN	.02	١	0.05	1	0.1	1	. 25		0.5	1.	0		R^2
1 8.67- 8.87	0.0481		0.0478	 	0.0466		0.0414		0.0386	0.035	 7	0.0430	12.2
2 9.38- 9.58	0.0957	-	0.0955		0.0955	- 1	0.0864		0.0833	0.079	2	0.0893	8.2
3 9.80-10.00	0.0250		0.0256		0.0255	-	0.0230	- [	0.0217	0.020	5	0.0236	9.1
4 10.35-10.55	0.0339		0.0347	- 1	0.0339	ı	0.0302	1	0.0285	0.026	7	0.0313	10.5

AROCLOR AVERAGE %RSD = 10.0

Aroclor-1260	LVL1	ſ	LVL2	I	LVL3		LVL4	1	LVL5	1	LVL6	1	MEAN	1	%RSD
Peak RT WIN	.02	1	0.05	1	0.1	١	.25	-	0.5		1.0	1		1	R^2
	0.1992	i	0.2005	i	0.1998	i		i	0.1792	İ	0.1768	ĺ	0.1904	İ	5.7
4 14.04-14.24				•		•								•	

AROCLOR AVERAGE %RSD = 8.7

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

	Aroclo	 r-1221	
Peak		RT WIN	Cal Factor
2	4.946 6.923 7.047	4.85- 5.05 6.82- 7.02 6.95- 7.15	0.00300 0.00486 0.01455
	Aroclo	r-1232 RT WIN	Cal Factor
2 3	4.946 7.046 8.759 9.658	4.85- 5.05 6.95- 7.15 8.66- 8.86 9.56- 9.76	0.00172 0.00980 0.01696 0.00541
	Aroclo	r-1242	
Peak	RT	RT WIN	Cal Factor
2 3 1		8.67- 8.87 8.96- 9.16 10.20-10.40 10.44-10.64	0.03076 0.01109 0.01405 0.01578
	<del>-</del> Aroclo	r-1248	
Peak	RT	RT WIN	Cal   Factor
2 3 1	9.403 9.848 0.297 0.542	9.30- 9.50 9.75- 9.95 10.20-10.40 10.44-10.64	0.00882 0.02086 0.02446 0.02496

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

Arocl	 or-1254	<u></u>
Peak RT	RT WIN	Cal Factor
1 10.305 2 10.626 3 11.007 4 11.144 5 11.858	10.21-10.41 10.53-10.73 10.91-11.11 11.04-11.24 11.76-11.96	0.01523 0.02246 0.01795 0.03393 0.02473
Arocle	 or-1262	
Peak RT	RT WIN	Cal Factor
1 12.408 2 13.085 3 13.461 4 13.625 5 14.171	12.31-12.51 12.99-13.19 13.36-13.56 13.52-13.72 14.07-14.27	0.10383 0.27054 0.07188 0.12224 0.10332
Aroclo	or-1268	 
Peak RT	RT WIN	Cal Factor
1 13.561 2 13.623 3 13.949 4 14.555	13.46-13.66 13.52-13.72 13.85-14.05 14.46-14.66	0.24308 0.23035 0.20684 0.63060

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMN4 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Arocl	or-1221	
Peak RT	RT WIN	Cal Factor
1 5.744 2 7.471 3 7.773 4 7.913	7.37- 7.57 7.67- 7.87	0.00821 0.01368 0.00799 0.02412
Arocl	or-1232	Cal
Peak RT	RT WIN	Factor
1 5.744 2 7.912 3 8.762 4 9.890	7.81- 8.01 8.66- 8.86	0.00506 0.01726 0.01985 0.01037
Arocl Peak RT	or-1242 RT WIN	Cal Factor
1 8.775 2 9.481 3 10.902 4 11.343	9.38- 9.58 10.80-11.00	0.03253 0.06762 0.02930 0.02943
Arocl Peak RT	or-1248 RT WIN	Cal   Factor
1 9.470 2 10.446 3 10.980 4 11.341	9.37- 9.57 10.35-10.55 10.88-11.08	0.04417 0.03719 0.03822 0.04818

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB35

Instrument ID: ECD7

	 Aroclo	or-1254	 
Peak	RT	RT WIN	Cal Factor
2 1 3 1 4 1	1.213 1.311 1.750 1.902 2.681	11.11-11.31 11.21-11.41 11.65-11.85 11.80-12.00 12.58-12.78	0.04173 0.01974 0.03299 0.06503 0.04305
	aroclo	or-1262	1
Peak	RT	RT WIN	Cal Factor
2 1: 3 1: 4 1	2.993 3.428 3.656 4.091	12.89-13.09 13.33-13.53 13.56-13.76 13.99-14.19 14.59-14.79	0.15518 0.14324 0.29125 0.12507 0.09594
	Aroclo	r-1268	
Peak	RT	RT WIN	Cal Factor
2 14 3 14	1.090 1.144 1.454 5.033	13.99-14.19 14.04-14.24 14.35-14.55 14.93-15.13	0.21797 0.20396 0.16487 0.46628

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/16/15

Lab Standard ID: AR1254 Time Analyzed :1748

		RT W	INDOW	CALC	MOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=======================================	=====	=====	=====	======	=======	====
Aroclor-1254-1	10.31	10.21	10.41	251.6	250.0	0.6
Aroclor-1254-2	10.63	10.53	10.73	276.7	250.0	10.7
Aroclor-1254-3	11.01	10.91	11.11	288.7	250.0	15.5
Aroclor-1254-4	11.14	11.04	11.24	286.9	250.0	14.8
Aroclor-1254-5	11.86	11.76	11.96	272.1	250.0	8.8
	•	•	•		•	•

AROCLOR AVG: 275.2 CAL %D = 10.1

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/16/15

Lab Standard ID: AR1660

Time Analyzed: 1809

		RT W	MDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
=======================================	=====	=====	=====	=======	======	=====
Aroclor-1016-1	8.27	8.17	8.37	245.0	250.0	-2.0
Aroclor-1016-2	8.76	8.66	8.86	243.9	250.0	-2.4
Aroclor-1016-3	9.06	8.96	9.16	248.8	250.0	-0.5
Aroclor-1016-4	9.85	9.75	9.95	253.1	250.0	1.2
	•	•	'		ı	l

AROCLOR AVG: 247.7 CAL %D = -0.9

Date Analyzed:09/16/15

Lab Standard ID: AR1660

Time Analyzed: 1809

		RT W	MODIN	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=======================================	=====	=====	=====	=======	=======	=====
Aroclor-1260-1	12.40	12.30	12.50	266.3	250.0	6.5
Aroclor-1260-2	13.08	12.98	13.18	261.9	250.0	4.8
Aroclor-1260-3	13.45	13.35	13.55	260.3	250.0	4.1
Aroclor-1260-4	13.56	13.45	13.65	255.4	250.0	2.2
Aroclor-1260-5	13.96	13.86	14.06	260.6	250.0	4.2
	· ·	•	•	,	•	•

AROCLOR AVG: 260.9 CAL %D = 4.4

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Lab Standard ID: AR1248

Time Analyzed :1956

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
=======================================	=====	=====	=====	======	======	=====
Aroclor-1248-1	9.40	9.30	9.50	262.5	250.0	5.0
Aroclor-1248-2	9.85	9.75	9.95	265.7	250.0	6.3
Aroclor-1248-3	10.30	10.20	10.40	261.6	250.0	4.6
Aroclor-1248-4	10.54	10.44	10.64	270.6	250.0	8.2
			•	•		•

AROCLOR AVG: 265.1 CAL %D = 6.0

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/16/15

Lab Standard ID: AR1660

Time Analyzed :2017

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	TRUOMA	%D
				(ng)	(ng)	
	: ======	=====	=====	======	======	=====
Aroclor-1016-1	8.27	8.17	8.37	244.1	250.0	-2.3
Aroclor-1016-2	8.76	8.66	8.86	242.6	250.0	-3.0
Aroclor-1016-3	9.06	8.96	9.16	247.4	250.0	-1.0
Aroclor-1016-4	9.85	9.75	9.95	250.2	250.0	0.1
	• •	•	'	•	•	•

AROCLOR AVG: 246.1 CAL %D = -1.6

Date Analyzed: 09/16/15

Lab Standard ID: AR1660 Time Analyzed: 2017

	KI. MI	INDOW	CALC	NOM	
RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=====	=====	=====	======	=======	=====
12.40	12.30	12.50	267.7	250.0	7.1
13.08	12.98	13.18	262.9	250.0	5.1
13.45	13.35	13.55	261.8	250.0	4.7
13.55	13.45	13.65	256.7	250.0	2.7
13.96	13.86	14.06	259.2	250.0	3.7
	12.40 13.08 13.45 13.55	RT FROM  ===== ==============================	RT FROM TO  12.40 12.30 12.50 13.08 12.98 13.18 13.45 13.35 13.55 13.55 13.45 13.65	RT FROM TO AMOUNT (ng)  ====== =============================	RT FROM TO AMOUNT (ng) (ng)

AROCLOR AVG: 261.6 CAL %D = 4.7

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed :09/16/15

Lab Standard ID: AR1254

Time Analyzed: 1748

		RT W	NDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
_======================================	======	=====	=====	======	=======	=====
Aroclor-1254-1	11.21	11.11	11.31	246.1	250.0	-1.6
Aroclor-1254-2	11.31	11.21	11.41	250.0	250.0	0.0
Aroclor-1254-3	11.75	11.65	11.85	252.3	250.0	0.9
Aroclor-1254-4	11.90	11.80	12.00	246.6	250.0	-1.4
Aroclor-1254-5	12.68	12.58	12.78	243.6	250.0	-2.5

AROCLOR AVG: 247.7 CAL %D = -0.9

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed :09/16/15

Lab Standard ID: AR1660

Time Analyzed :1809

7,00		INDOW	CALC	NOM	0.70
RT	FROM		(ng)	AMOUNT (ng)	\ \%D
_	======	=====	=======	=======	=====
8.77	8.67	8.87	235.7	250.0	-5.7
9.48	9.38	9.58	240.9	250.0	-3.6
9.90	9.80	10.00	244.8	250.0	-2.1
10.45	10.35	10.55	188.0	250.0	-24.8
	9.48	RT FROM  = ===== 8.77 8.67 9.48 9.38	RT FROM TO  = =====	RT FROM TO AMOUNT (ng)  = ===== 8.77 8.67 8.87 235.7 9.48 9.38 9.58 240.9 9.90 9.80 10.00 244.8	RT FROM TO AMOUNT (ng) (ng)  = ===== 8.77 8.67 8.87 235.7 250.0  9.48 9.38 9.58 240.9 250.0  9.90 9.80 10.00 244.8 250.0

AROCLOR AVG: 227.3 CAL %D = -9.1

Date Analyzed: 09/16/15

Lab Standard ID: AR1660

Time Analyzed: 1809

COMPOUND/PEAK NO.	RT	RT WI FROM	INDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
	=====	=====	=====	=======	=======	=====
Aroclor-1260-1	12.99	12.90	13.10	222.9	250.0	-10.8
Aroclor-1260-2	13.66	13.56	13.76	224.8	250.0	-10.1
Aroclor-1260-3	14.09	13.99	14.19	221.1	250.0	-11.5
Aroclor-1260-4	14.14	14.04	14.24	224.4	250.0	-10.2

AROCLOR AVG: 223.3 CAL %D = -10.7

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed :09/16/15

Lab Standard ID: AR1248 Time Analyzed :1956

	K.I. M.I	INDOW	CALC	NOM	
RT	FROM	TO	AMOUNT	TRUDOMA	%D
			(ng)	(ng)	
======	=====	=====	======	=======	=====
9.47	9.37	9.57	241.3	250.0	-3.5
10.45	10.35	10.55	191.3	250.0	-23.5
10.98	10.88	11.08	234.5	250.0	-6.2
11.34	11.24	11.44	231.7	250.0	-7.3
	9.47 10.45 10.98	RT FROM  ===== 9.47 9.37 10.45 10.35 10.98 10.88	RT FROM TO  ===== 9.47 9.37 9.57 10.45 10.35 10.55 10.98 10.88 11.08	RT FROM TO AMOUNT (ng)  ====== 9.47 9.37 9.57 241.3 10.45 10.35 10.55 191.3 10.98 10.88 11.08 234.5	RT FROM TO AMOUNT (ng) (ng)  ====== 9.47 9.37 9.57 241.3 250.0 10.45 10.35 10.55 191.3 250.0 10.98 10.88 11.08 234.5 250.0

AROCLOR AVG: 224.7 CAL %D = -10.1

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/16/15

Lab Standard ID: AR1660

Time Analyzed :2017

		RT W	NDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
_======================================	======	=====	=====	=======	=======	====
Aroclor-1016-1	8.77	8.67	8.87	234.7	250.0	-6.1
Aroclor-1016-2	9.48	9.38	9.58	239.4	250.0	-4.2
Aroclor-1016-3	9.90	9.80	10.00	242.5	250.0	-3.0
Aroclor-1016-4	10.45	10.35	10.55	187.5	250.0	-25.0
	•	•		•	,	•

AROCLOR AVG: 226.0 CAL %D = -9.6

Date Analyzed:09/16/15

Lab Standard ID: AR1660

Time Analyzed :2017

		RT W	MDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
			~	(ng)	(ng)	
Aroclor-1260-1	13.00	12.90	13.10	223.0	250.0	-10.8
Aroclor-1260-2	13.66	13.56	13.76	223.2	250.0	-10.7
Aroclor-1260-3	14.09	13.99	14.19	211.9	250.0	-15.2
Aroclor-1260-4	14.14	14.04	14.24	215.3	250.0	-13.9
						•

AROCLOR AVG: 218.3 CAL %D = -12.7

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB5

ID: 0.53 (mm)

Instrument ID: ECD7

Init. Calib. Date: 08/03/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

			1		IS1		IS2	
			i		AREA	RT	AREA	RT
			  ======		AKBA    =======	=======	AREA =======	======
			!	MIDPT	6328212	3.263	5068453	
			UPPER	LIMIT	12656424	3.363	10136906	
			LOWER		3164106	3.163	2534226	
			į					
1	CLIENT	LAB	DATE		IS1		IS2	i
i	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
i	==========		========		=======	======	=======	======
01	ZZZZZ	ZZZZZ	08/03/15	1716	6222621	3.258	5047030	15.102
02		0.25PPMAR166	08/03/15	1737	6328212	3.263	5068453	15.102
03		0.02PPMAR166	08/03/15	1758	6326177	3.262	5154907	15.102
04		0.05PPMAR166	08/03/15	1820	6210580	3.264	5033371	15.102
05		1PPMAR1660	08/03/15	1841	6160991	3.266	4985647	15.103
06		0.1PPMAR1660	08/03/15	1902	6344317	3.268	5407220	15.103
07		0.5PPMAR1660	08/03/15	1924	6159955	3.267	5303929	15.103
08	,	AR1242	08/03/15	1945	6219986	3.265	5066767	15.103
09		AR1248	08/03/15	2007	6249050	3.265	5356854	15.103
10		AR1254	08/03/15	2028	6326911	3.267	5032449	15.103
11		AR2162	08/03/15	2049	6246099	3.266	4938617	15.103
12		AR3268	08/03/15	2111	6259531	3.265	5003661	15.103
13	ZZZZZ	ZZZZZ	08/03/15	2132	6338133	3.267	5037306	15.103
14	ZZZZZ	ZZZZZ	08/03/15	2153	6038309	3.262	5048403	15.103
15	ZZZZZ	ZZZZZ	08/03/15	2214	6208035	3.265	5032536	15.103
16	ZZZZZ	ZZZZZ	08/03/15	2236	6278544	3.265	5100405	15.103
17	ZZZZZ	ZZZZZ	08/03/15	2257	6251565	3.264	5061467	15.103
18	ZZZZZ	ZZZZZ	08/03/15	2318	6317415	3.264	5061451	15.102
19		AR1254	09/16/15	1748	8332316	3.276	6114042	15.095
20		AR1660	09/16/15	1809	7718631	3.276	5947572	15.096
21	AMN4MBS1	AMN4MBS1	09/16/15	1830	7435613	3.276	6031448	15.096
22	AMN4LCSS1	AMN4LCSS1	09/16/15	1852	7527245	3.276	6270571	15.096
23	CMP12-B08-1+	AMN4A	09/16/15	1913	7486654	3.277	5319612	15.096
24	CMP24-B09-1+	AMN4B	09/16/15	1934	7244747	3.278	5350231	15.096
25		AR1248	09/16/15	1956	9297700	3.277	6698333	15.095
26		AR1660	09/16/15	2017	7803653	3.273	5858831	15.096
				l	l	l	l	l

IS1 = 1-Bromo-2-Nitrobenzene

RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

^{*} Indicates value outside QC Limits

### FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMN4

Project: JFOS3

GC Column: ZB35 ID: 0.53 (mm)

Instrument ID: ECD7

Init. Calib. Date: 08/03/15

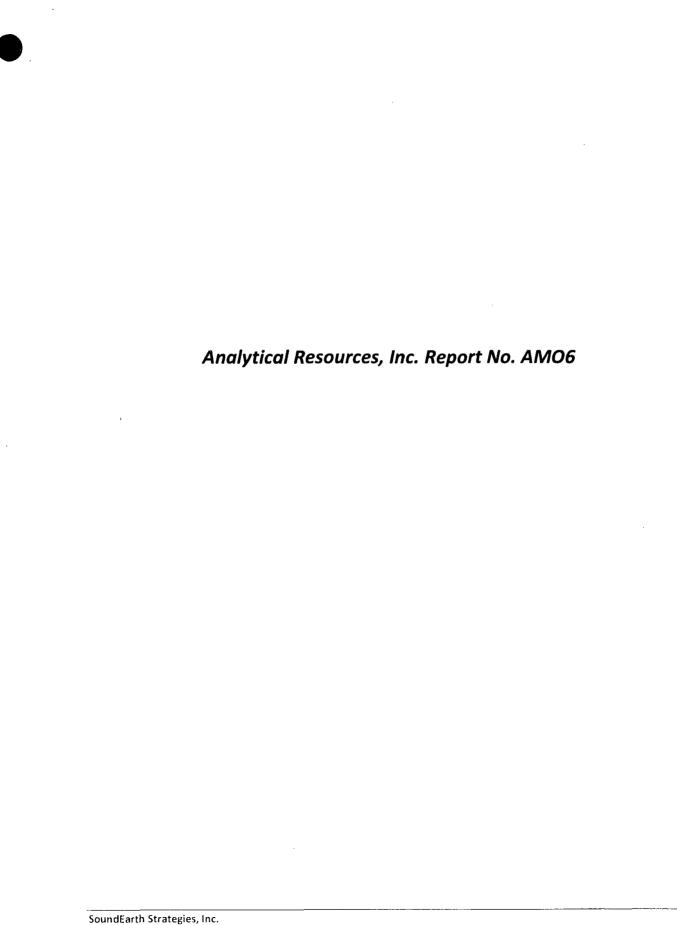
THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

			1		IS1		IS2	
			1		AREA	RT	AREA	RT
			======		=======	======	========	======
			ICAL	MIDPT	12901249	4.365	7598346	15.906
			UPPER	LIMIT	25802498	4.465	15196692	16.006
			LOWER	LIMIT	6450624	4.265	3799173	15.806
					l			
ļ	CLIENT	LAB	DATE		IS1		IS2	
	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
	=========			=====	=======	======	========	======
	ZZZZZ	ZZZZZ	08/03/15	1716	12615423	4.360	7577981	15.906
02		0.25PPMAR166	08/03/15	1737	12901249	4.365	7598346	15.906
03		0.02PPMAR166	08/03/15	1758	12889538	4.366	7674080	15.906
04		0.05PPMAR166	08/03/15	1820	12701605	4.367	7596138	15.906
05		1PPMAR1660	08/03/15	1841	12722963	4.369	7648810	15.907
06		0.1PPMAR1660	08/03/15	1902	13013744	4.371	7786984	15.907
07		0.5PPMAR1660	08/03/15	1924	12706249	4.370	7776969	15.907
08		AR1242	08/03/15	1945	12825517	4.369	7804063	15.906
09		AR1248	08/03/15	2007	12932061	4.369	7871936	15.906
10		AR1254	08/03/15	2028	13098041	4.370	7793570	15.907
11		AR2162	08/03/15	2049	12808024	4.369	7735916	15.907
12		AR3268	08/03/15	2111	12831845	4.369	7828166	15.907
13	ZZZZZ	ZZZZZ	08/03/15	2132	13048327	4.369	7840797	15.907
14	ZZZZZ	ZZZZZ	08/03/15	2153	12451023	4.366	7728754	15.907
15	ZZZZZ	ZZZZZ	08/03/15	2214	12732082	4.367	7695088	15.907
16	ZZZZZ	ZZZZZ	08/03/15	2236	12892489	4.368	7804248	15.906
17	ZZZZZ	ZZZZZ	08/03/15	2257	12666986	4.367	7848857	15.907
18	ZZZZZ	ZZZZZ	08/03/15	2318	12781896	4.367	7841933	15.907
19		AR1254	09/16/15	1748	14323070	4.384	9069058	15.906
20		AR1660	09/16/15	1809	13425287	4.385	8445720	15.906
,	AMN4MBS1	AMN4MBS1	09/16/15	1830	20058790	4.385	8372226	15.906
22	AMN4LCSS1	AMN4LCSS1	09/16/15	1852	14421797	4.387	8504249	15.907
23	CMP12-B08-1+	AMN4A	09/16/15	1913	16568472	4.386	7207119	15.905
24	CMP24-B09-1+	AMN4B	09/16/15	1934	16182103	4.387	7122036	15.906
25		AR1248	09/16/15	1956	15831175	4.387	8985672	15.906
26		AR1660	09/16/15	2017	13587616	4.384	7983061	15.906
							l	

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

^{*} Indicates value outside QC Limits





17 September 2015

Dee Gardner Sound Earth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

RE: JFOS3

ARI Job No.: AMO6

Dear Dee:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. received two soil samples on September 16, 2015. The samples were analyzed for PCBs as requested.

These analyses proceeded without incident of note.

If you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris Project Manager 206/695-6210 markh@arilabs.com

cc: Miles Dyer, Jorgensen Forge file AMO6

Enclosures

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: Turn-around Requested: 24 HOURS  ARI Client Company: Torgensen Forge Grp. 206.762.1100			Page: Date:	9/16/1	of Ice Pres	ent?	es	4	Analytic 4611 Sc Tukwila	cal Resources, Incorporated cal Chemists and Consultants outh 134th Place, Suite 100 , WA 98168 5-6200 206-695-6201 (fax)		
Client Contact: MILES DYER					No. of Coolers:	)	Coole	er 2.	6			ilabs.com
Client Project Name: JFoS 3								Analysis	Requested			Notes/Comments
Client Project #:	Samplers:	J. LOEI	FFLER		6y 8082							STAGE 2B REPORTING PER
Sample ID	Date	Time	Matrix	No. Containers	PCBs EPA 8							SAP/QAPP
CMP12-B07-1+06	9/16/15	1140	SOIL	1	×							
CMP24-B10-1+05	9/16/15	1155	SOIL	(	X				12			
						Λ Λ	,					
							1 9	16/15				
						00						
CC: DEE GARDNER AT	Relinquished by: (Signature)	mit to	~	Received by: (Signature)	h	_		Relinquished (Signature)	i by:		Received by: (Signature)	
SOUNDEARTH	Printed Name:	HAN LO	EFFLER	Printed Name:	is A	mel		Printed Nam	e:		Printed Name	2:
dgardner@soundearth inc.com	Company:	EARTH		Company:				Company:			Company:	
IND.COM	Date & Time: 9/16/15	5@13	38	Date & Time	5	1338	3	Date & Time			Date & Time:	

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or cosigned agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.



# **Cooler Receipt Form**

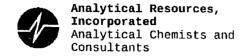
ARI Client: Jorgensen F	orge	Project Name: JFDS	3		
COC No(s):	NA	Delivered by: Fed-Ex UPS Couri	er Hand Delive	red Other:_	
Assigned ARI Job No:	00	Tracking No:			NA
Preliminary Examination Phase:		Tracking No.			
Were intact, properly signed and da	ted custody seals attached to	the outside of to cooler?	)	YES	NO
Were custody papers included with			2	(ES)	NO
Were custody papers properly filled				YEŞ	NO
Temperature of Cooler(s) (°C) (reco					
If cooler temperature is out of comp			Temp Gun ID#		SCS
Cooler Accepted by:	11		1338	3	
	Complete custody forms a	and attach all shipping documents			
Log-In Phase:					
Was a temperature blank included i				YES	NO
		Wet Ice Gel Packs Baggies Foam	Block Paper O	_	
Was sufficient ice used (if appropria			NA	ES	NO
Were all bottles sealed in individual				YES	(O)
Did all bottles arrive in good conditi				(ES)	NO
Were all bottle labels complete and				YES	NO
Did the number of containers listed		(ES)	NO		
Did all bottle labels and tags agree	with custody papers?			YES	NO
Were all bottles used correct for the	requested analyses?			(ES)	NO
		eservation sheet, excluding VOCs)	NA	YES	CNO)
Were all VOC vials free of air bubbl	es?		(NA)	YES	NO
Was sufficient amount of sample se	ent in each bottle?			(ES)	NO
Date VOC Trip Blank was made at	ARI		(NA)		
Was Sample Split by ARI: NA	YES Date/Time:	Equipment:		Split by:_	
Samples Logged by:	Date	: 9/10/16 Time:	1352		
	** Notify Project Manage	er of discrepancies or concerns **			
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sami	ple ID on C	OC
		- Campions on Samo			
	***				
Additional Notes, Discrepancies	& Resolutions:				
By: Date	ı.				
Small Air Bubbles   Peabubble		Small → "sm" (<2 mm)			
= 2mm 2-4 mm	LARGE Air Bubbles	Peabubbles > "pb" (2 to < 4 mm)	Till-a-marking		
	0 0 0 0	Large → "lg" (4 to < 6 mm)			
0 0		Headspace → "hs" (>6 mm)			

# Sample ID Cross Reference Report



ARI Job No: AMO6
Client: Jorgensen Forge
Project Event: N/A
Project Name: JFOS3

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	CMP12-B07-1+06	AMO6A	15-16466		09/16/15 11:40	09/16/15 13:38
2.	CMP24-B10-1+05	AMO6B	15-16467		09/16/15 11:55	09/16/15 13:38



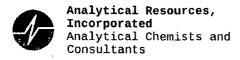
# Data Reporting Qualifiers Effective 12/31/13

## **Inorganic Data**

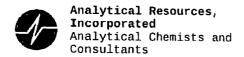
- U Indicates that the target analyte was not detected at the reported concentration
- * Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but ≥ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

# **Organic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.



- Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
- S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (Dioxin/Furan analysis only)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated diphenyl ethers. (Dioxin/Furan analysis only)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (Dioxin/Furan analysis only)



## **Geotechnical Data**

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- W Weight of sample in some pipette aliquots was below the level required for accurate weighting



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: MB-091615 LIMS ID: 15-16466

Matrix: Soil

Data Release Authorized: \WW

Reported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/17/15 09:46 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: MB-091615 METHOD BLANK

QC Report No: AMO6-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g Final Extract Volume: 5.00 mL Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 บ
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 ป
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141 <b>-</b> 16-5	Aroclor 1232	20	< 20 U
37324-23-5	Aroclor 1262	20	< 20 U
11100-14-4	Aroclor 1268	20	< 20 U

Reported in µg/kg (ppb)

### PCB Surrogate Recovery

Decachlorobiphenyl	109%
Tetrachlorometaxylene	101%

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AMO6A LIMS ID: 15-16466

Matrix: Soil

Data Release Authorized: WW

Reported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/17/15 10:28 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: CMP12-B07-1+06 SAMPLE

QC Report No: AMO6-Jorgensen Forge Project: JFOS3

Date Sampled: 09/16/15 Date Received: 09/16/15

Sample Amount: 5.48 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 22.0%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	18	< 18 U
53469-21-9	Aroclor 1242	18	< 18 U
12672-29-6	Aroclor 1248	18	< 18 U
11097-69-1	Aroclor 1254	18	< 18 U
11096-82-5	Aroclor 1260	18	< 18 U
11104-28-2	Aroclor 1221	18	< 18 U
11141-16-5	Aroclor 1232	18	< 18 U
37324-23-5	Aroclor 1262	18	< 18 U
11100-14-4	Aroclor 1268	18	< 18 U

Reported in µg/kg (ppb)

### PCB Surrogate Recovery

Decachlorobiphenyl	91.0%
Tetrachlorometaxylene	85.2%

**ANALYTICAL** RESOURCES INCORPORATED

Sample ID: CMP24-B10-1+05 SAMPLE

ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AMO6B LIMS ID: 15-16467

Matrix: Soil

Data Release Authorized: WW

Reported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/17/15 10:50 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No QC Report No: AMO6-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/16/15 Date Received: 09/16/15

Sample Amount: 5.55 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 20.7%

CAS Number	Analyte	9	LOQ	Res	ılt	
12674-11-2	Aroclor 10:	16	18	<	18	U
53469-21-9	Aroclor 12	12	18	<	18	U
12672-29-6	Aroclor 124	48	18	<	18	U
11097-69-1	Aroclor 125	54	18	<	18	U
11096-82-5	Aroclor 120	50	18	<	18	U
11104-28-2	Aroclor 122	21	18	<	18	U
11141-16-5	Aroclor 12:	32	18	<	18	U
37324-23-5	Aroclor 12	52	18		39	_
11100-14-4	Aroclor 120	58	18	<	18	U

Reported in µg/kg (ppb)

### PCB Surrogate Recovery

Decachlorobiphenyl	96.2%
Tetrachlorometaxylene	100%



## SW8082/PCB SOIL/SOLID/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: AMO6-Jorgensen Forge Project: JFOS3

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-091615	109%	59-115	101%	58-112	0
LCS-091615	108%	59-115	102%	58-112	0
CMP12-B07-1+06	91.0%	47-120	85.2%	53-116	0
CMP24-B10-1+05	96.2%	47-120	100%	53-116	0

Microwave (MARS) Control Limits PCBSMI

Prep Method: SW3546 Log Number Range: 15-16466 to 15-16467



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Page 1 of 1

Lab Sample ID: LCS-091615

LIMS ID: 15-16466

Matrix: Soil

Data Release Authorized: NW

Reported: 09/17/15

Date Extracted: 09/16/15 Date Analyzed: 09/17/15 10:07 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: LCS-091615 LAB CONTROL

QC Report No: AMO6-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g-dry-wt Final Extract Volume: 5.00 mL

Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	506	500	101%
Aroclor 1260	564	500	113%

### PCB Surrogate Recovery

Decachlorobiphenyl	108%
Tetrachlorometaxylene	102%

Results reported in µg/kg (ppb)

# PCB METHOD BLANK SUMMARY

BLANK NO.

AMO6MBS1

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

Lab Sample ID: AMO6MBS1

Lab File ID: 09171507

Date Extracted: 09/16/15

Matrix: SOLID

Date Analyzed: 09/17/15

Instrument ID: ECD7

Time Analyzed: 0946

GC Columns: ZB5/ZB35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
	=======================================		========
01	AMO6LCSS1	AMO6LCSS1	09/17/15
02	CMP12-B07-1+06	AMO6A	09/17/15
03	CMP24-B10-1+05	AMO6B	09/17/15
			, ,

ALL RUNS ARE DUAL COLUMN

## 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMO6 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

RT WIN	LVL1	LVL2	LVL3	LVL4	LVL5	LVL6	MEAN	%RSD
TCX 6.17- 6.37   DCB 14.74-14.94		•	•	•	•	•		

Arocl	or-1016	LVL1	- 1	LVL2	-	LAP3	- [	LVL4	- 1	LVL5	- 1	LVL6		MEAN	- 1	₹RSD
	RT WIN				•		•		•				•		•	
	8.18- 8.38															
2	8.66- 8.86	0.0388	-1	0.0418	1	0.0425	- 1	0.0396	-1	0.0390	-1	0.0384	-	0.0400	١	4.3
3	8.96- 9.16	0.0123	-	0.0144		0.0149	- 1	0.0140	-	0.0138	-1	0.0134	-	0.0138	-	6.5
4	9.75- 9.95	0.0139	- 1	0.0149	-	0.0160	- 1	0.0148	- 1	0.0146	-1	0.0141	-1	0.0147	- 1	4.

AROCLOR AVERAGE %RSD = 5.4

Aroclor	-1260	LVL1		LVL2	1	LVL3	-1	LVL4	ı	LVL5		LVL6		MEAN	-	₹RSD
Peak	RT WIN	.02	-	0.05	1		•	. 25	•		•					R^2
1 12.	30-12.50	0.0491		0.0528	1											
2 12.	98-13.18	0.1300	-	0.1509	- 1	0.1533	- [	0.1635	1	0.1585		0.1747	1	0.1551		9.6
3 13.	36-13.56	0.0548	-	0.0622	ŀ	0.0625	1	0.0650		0.0614	.	0.0659	ļ	0.0620		6.4
4 13.	46-13.66	0.0356	-	0.0404	- 1	0.0408	ı	0.0424	- 1	0.0400	- 1	0.0425		0.0403	-1	6.3
5 13.	86-14.06	0.0162	- 1	0.0197	- 1	0.0199	i	0.0205	1	0.0194		0.0207	- ]	0.0194	- 1	8.4

AROCLOR AVERAGE %RSD = 6.9

### 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMO6 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

RT WIN   LVL1   LVL2   LVL3   LVL4   LVL5   LVL6   MEAN   %RSD	- 1			<b></b>	. <b>.</b>		<b></b>				
TCX 6.56- 6.76  0.9749   1.0337   1.0794   1.0345   1.0222   0.9958   1.0234   3.5    DCB 15.22-15.42  1.1059   1.0972   1.1143   1.0244   1.0035   0.9886   1.0556   5.3		•	•	•	•	•		•	•	•	
	•	TCX 6.56- 6.76  0.	9749   1	.0337   1	L.0794   L.1143	1.0345   1.0244	1.0222     1.0035	0.9958   0.9886	1.0234   1.0556	3.5   5.3	

Arocl	lor-1016	LVL1	$\perp$	LVL2	- 1	LVL3	1	LVL4	-	LVL5	1	LVL6	ı	MEAN		&RSD
Peak	RT WIN	. 02	-	0.05	١	0.1	1	.25	1	0.5	1	1.0	١			R^2
1	8.67- 8.87	0.0481		0.0478		0.0466	 	0.0414	1	0.0386		0.0357		0.0430		12.2
2	9.38- 9.58	0.0957		0.0955		0.0955		0.0864	1	0.0833	-	0.0792	1	0.0893	-	8.2
3	9.80-10.00	0.0250	-	0.0256	-1	0.0255	-	0.0230	1	0.0217		0.0205		0.0236		9.1
4 1	10.35-10.55	0.0339	- 1	0.0347	- 1	0.0339	ĺ	0.0302	-	0.0285	-	0.0267		0.0313	1	10.5

AROCLOR AVERAGE %RSD = 10.0

Aroclor-1260	LVL1		LVL2	-	LVL3		LVL4		LVL5		LVL6	-	MEAN	-	&RSI
Peak RT WIN	.02	-	0.05	1		-		•					<b></b>		
1 12.90-13.10	0.0940	 	0.0922												
2 13.56-13.76	0.1992		0.2005	-	0.1998		0.1867	1	0.1792	-1	0.1768	1	0.1904		5.7
3 13.99-14.19	0.0651	- 1	0.0649		0.0637	- 1	0.0574	- 1	0.0536	-1	0.0519	1	0.0594	-	10.0
4 14.04-14.24	0.1332	- 1	0.1340	- 1	0.1333	- 1	0.1212	- 1	0.1155	- 1	0.1129	- 1	0.1250	- 1	7.7

AROCLOR AVERAGE %RSD = 8.7

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMO6 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Aroclor-1221         Cal           Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00300           2         6.923         6.82-7.02         0.00486           3         7.047         6.95-7.15         0.01455           Aroclor-1232         Cal           Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172         0.00980           3         8.759         8.66-8.86         0.01696         0.01696           4         9.658         9.56-9.76         0.00541           Aroclor-1242         Cal         Factor           1         8.765         8.67-8.87         0.03076         0.0109           2         9.063         8.96-9.16         0.01109         0.01405           3         10.298         10.20-10.40         0.01405           4         10.544         10.44-10.64         0.01578    Aroclor-1248  Peak  RT  RT WIN  Factor  1  9.404  9.30-9.50  0.00882  2  9.848  9.75-9.95  0.02086  3 10.298  10.20-10.40  0.02446  4 10.543  10.44-10.64  0.02496				
1 4.946 4.85-5.05   0.00300   2 6.923 6.82-7.02   0.00486   3 7.047 6.95-7.15   0.01455	Peak			
2 6.923 6.82-7.02 0.00486 3 7.047 6.95-7.15 0.01455  Aroclor-1232 Cal Peak RT RT WIN Factor  1 4.946 4.85-5.05 0.00172 2 7.046 6.95-7.15 0.00980 3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446				
2 6.923 6.82-7.02 0.00486 3 7.047 6.95-7.15 0.01455  Aroclor-1232 Cal Peak RT RT WIN Factor  1 4.946 4.85-5.05 0.00172 2 7.046 6.95-7.15 0.00980 3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446	1	4.946	4.85- 5.05	0.00300
Aroclor-1232				1
Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172           2         7.046         6.95-7.15         0.00980           3         8.759         8.66-8.86         0.01696           4         9.658         9.56-9.76         0.00541    Aroclor-1242  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Factor  1         9.404         9.30-9.50         0.00882           2         9.848         9.75-9.95         0.02086         0.02446	3	7.047	6.95- 7.15	0.01455
Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172           2         7.046         6.95-7.15         0.00980           3         8.759         8.66-8.86         0.01696           4         9.658         9.56-9.76         0.00541    Aroclor-1242  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Factor  1         9.404         9.30-9.50         0.00882           2         9.848         9.75-9.95         0.02086         0.02446		<b>-</b>		
Peak RT RT WIN Factor  1 4.946 4.85-5.05 0.00172 2 7.046 6.95-7.15 0.00980 3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446		Aroclo	 r-1232	 
1 4.946 4.85-5.05   0.00172 2 7.046 6.95-7.15   0.00980 3 8.759 8.66-8.86   0.01696 4 9.658 9.56-9.76   0.00541  Aroclor-1242   Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87   0.03076 2 9.063 8.96-9.16   0.01109 3 10.298 10.20-10.40   0.01405 4 10.544 10.44-10.64   0.01578  Aroclor-1248   Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50   0.00882 2 9.848 9.75-9.95   0.02086 3 10.298 10.20-10.40   0.02446				Cal
2 7.046 6.95- 7.15 0.00980 3 8.759 8.66- 8.86 0.01696 4 9.658 9.56- 9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67- 8.87 0.03076 2 9.063 8.96- 9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30- 9.50 0.00882 2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446	Peak	RT	RT WIN	Factor
2 7.046 6.95- 7.15 0.00980 3 8.759 8.66- 8.86 0.01696 4 9.658 9.56- 9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67- 8.87 0.03076 2 9.063 8.96- 9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30- 9.50 0.00882 2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446		4 046	4 05 5 05	1 0 00170
3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446	_			
Aroclor-1242  Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Peak RT RT WIN Factor  Aroclor-1248  Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446				
Aroclor-1242  Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Cal  Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446				1
Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446				
Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446				
Peak         RT         RT WIN         Factor           1         8.765         8.67-8.87         0.03076           2         9.063         8.96-9.16         0.01109           3         10.298         10.20-10.40         0.01405           4         10.544         10.44-10.64         0.01578    Aroclor-1248  Peak  RT WIN  Factor  1  9.404  9.30-9.50  0.00882  2  9.848  9.75-9.95  0.02086  3  10.298  10.20-10.40  0.02446		Aroclo	r-1242	1
1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446				
2 9.063 8.96- 9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30- 9.50 0.00882 2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446	Peak	RT	RT WIN	Factor
2 9.063 8.96- 9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30- 9.50 0.00882 2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446	1	9 765	9 67- 9 97	1 0 03076
3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446	_			
Aroclor-1248  Cal  Peak RT RT WIN Factor  1 9.404 9.30- 9.50 0.00882 2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446				
Aroclor-1248  Cal  Peak RT RT WIN Factor  1 9.404 9.30- 9.50 0.00882 2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446	i e			
Cal Peak RT RT WIN Factor  1 9.404 9.30-9.50 0.00882 2 9.848 9.75-9.95 0.02086 3 10.298 10.20-10.40 0.02446				
Cal Peak RT RT WIN Factor  1 9.404 9.30- 9.50 0.00882 2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446				
Peak         RT         RT WIN         Factor           1         9.404         9.30- 9.50         0.00882           2         9.848         9.75- 9.95         0.02086           3         10.298         10.20-10.40         0.02446		Aroclo	r-1248	g - 3
1 9.404 9.30- 9.50   0.00882 2 9.848 9.75- 9.95   0.02086 3 10.298 10.20-10.40   0.02446	D = - 1-	D.07	DO LITA	
2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446	reak	KT	KT. MTM	ractor
2 9.848 9.75- 9.95 0.02086 3 10.298 10.20-10.40 0.02446	1	9.404	9.30- 9.50	0.00882
3 10.298 10.20-10.40 0.02446	1			
4 10.543 10.44-10.64   0.02496	3			
	4	10.543	10.44-10.64	0.02496

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

	Aroclo	or-1254	
Peak	RT	RT WIN	Cal Factor
2 1 3 1 4 1	0.305 0.625 1.007 1.144 1.858	10.21-10.41 10.53-10.73 10.91-11.11 11.04-11.24 11.76-11.96	0.01523 0.02246 0.01795 0.03393 0.02473
	Aroclo	r-1262	 
Peak	RT	RT WIN	Cal Factor
2 13 3 13 4 13	2.408 3.085 3.461 3.625	12.31-12.51 12.99-13.19 13.36-13.56 13.52-13.72 14.07-14.27	0.10383 0.27054 0.07188 0.12224 0.10332
	Aroclo	r-1268	
_	RT	RT WIN	Cal Factor
2 13 3 13	3.561 3.623 3.949 3.555	13.46-13.66 13.52-13.72 13.85-14.05 14.46-14.66	0.24308 0.23035 0.20684 0.63060

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMO6 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 08/03/15

	Aroclo	r-1221	1
Peak	ъш	DM 17737	Cal
Peak	RT	RT WIN	Factor
1	5.744	5.64- 5.84	0.00821
2	7.471	7.37- 7.57	0.01368
3	7.773	7.67- 7.87	0.00799
4	7.913	7.81- 8.01	0.02412
	Aroclo	r-1232	
	1110010	1 1232	Cal
Peak	RT	RT WIN	Factor
1	5.744	5.64- 5.84	0.00506
2	7.912	7.81- 8.01	0.01726
3	8.762	8.66- 8.86	0.01985
4	9.890	9.79- 9.99	0.01037
	Aroclo		
	ALOCIO	1-1242	Cal
Peak	RT	RT WIN	Factor
1	8.775	8.67- 8.87	0.03253
2	9.481	9.38- 9.58	0.06762
	10.902	10.80-11.00	0.02930
4	11.343	11.24-11.44	0.02943
	Aroclo		
(	MIOCIO	1-1240	Cal
Peak	RT	RT WIN	Factor
1	9.472	9.37- 9.57	0.04417
	10.447	10.35-10.55	0.03719
	10.981	10.88-11.08	0.03822
4	11.342	11.24-11.44	0.04818
		~	

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB35

Instrument ID: ECD7

Calibration Date: 08/03/15

	 Aroclo	or-1254	
Peak	RT	RT WIN	Cal Factor
2 1: 3 1: 4 1:	1.213 1.310 1.750 1.901 2.681	11.11-11.31 11.21-11.41 11.65-11.85 11.80-12.00 12.58-12.78	0.04173 0.01974 0.03299 0.06503 0.04305
1	Aroclo	r-1262	Cal
Peak	RT	RT WIN	Factor
2 13 3 13 4 14	2.993 3.428 3.656 4.091 4.686	12.89-13.09 13.33-13.53 13.56-13.76 13.99-14.19 14.59-14.79	0.15518 0.14324 0.29125 0.12507 0.09594
	rogle	 	
Peak	RT	RT WIN	Cal Factor
2 14 3 14	.090 .144 .454	13.99-14.19 14.04-14.24 14.35-14.55 14.93-15.13	0.21797 0.20396 0.16487 0.46628

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/17/15

Lab Standard ID: AR1254

Time Analyzed: 0840

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	=====	=====	=====	=======	=======	=====
Aroclor-1254-1	10.31	10.21	10.41	262.1	250.0	4.8
Aroclor-1254-2	10.63	10.53	10.73	284.0	250.0	13.6
Aroclor-1254-3	11.01	10.91	11.11	288.6	250.0	15.4
Aroclor-1254-4	11.14	11.04	11.24	285.7	250.0	14.3
Aroclor-1254-5	11.86	11.76	11.96	270.7	250.0	8.3
		•		•	•	•

AROCLOR AVG: 278.2 CAL %D = 11.3

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/17/15

Lab Standard ID: AR1660 Time Analyzed: 0901

COMPOUND/PEAK NO.	RT	RT WI FROM	TO TO	CALC AMOUNT (ng)	NOM TNUOMA (ng)	%D
	=====	=====	=====	=======	=======	=====
Aroclor-1016-1	8.28	8.18	8.38	243.9	250.0	-2.4
Aroclor-1016-2	8.76	8.66	8.86	242.8	250.0	-2.9
Aroclor-1016-3	9.06	8.96	9.16	247.6	250.0	-1.0
Aroclor-1016-4	9.85	9.75	9.95	251.7	250.0	0.7

AROCLOR AVG: 246.5 CAL %D = -1.4

Date Analyzed:09/17/15

Lab Standard ID: AR1660 Time Analyzed: 0901

		RT W	NDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
======================================	=====	=====	=====	======	=======	=====
Aroclor-1260-1	12.40	12.30	12.50	265.4	250.0	6.2
Aroclor-1260-2	13.08	12.98	13.18	272.3	250.0	8.9
Aroclor-1260-3	13.45	13.36	13.56	271.2	250.0	8.5
Aroclor-1260-4	13.56	13.46	13.66	267.1	250.0	6.8
Aroclor-1260-5	13.96	13.86	14.06	271.1	250.0	8.4

AROCLOR AVG: 269.4 CAL %D = 7.8

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed :09/17/15

Lab Standard ID: AR1248

Time Analyzed:1111

		RT W	INDOM	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
=======================================	=====	=====	======	=======	======	=====
Aroclor-1248-1	9.40	9.30	9.50	259.6	250.0	3.8
Aroclor-1248-2	9.85	9.75	9.95	263.7	250.0	5.5
Aroclor-1248-3	10.30	10.20	10.40	259.4	250.0	3.8
Aroclor-1248-4	10.54	10.44	10.64	267.1	250.0	6.8
					·	· 

AROCLOR AVG: 262.4 CAL %D = 5.0

Lab Name: ANALYTICAL RESOURCES INC Cli

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/17/15

Lab Standard ID: AR1660 Time Analyzed :1132

	RT W	INDOM	CALC	NOM	
RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=====	=====	=====	======	=======	=====
8.28	8.18	8.38	243.8	250.0	-2.5
8.76	8.66	8.86	243.0	250.0	-2.8
9.06	8.96	9.16	248.4	250.0	-0.6
9.85	9.75	9.95	250.9	250.0	0.4
	8.28 8.76 9.06	RT FROM  ===== 8.28 8.18 8.76 8.66 9.06 8.96	8.28 8.18 8.38 8.76 8.66 8.86 9.06 8.96 9.16	RT FROM TO AMOUNT (ng)  ====== 8.28 8.18 8.38 243.8 8.76 8.66 8.86 243.0 9.06 8.96 9.16 248.4	RT FROM TO AMOUNT (ng) (ng)  ====== 8.28 8.18 8.38 243.8 250.0 8.76 8.66 8.86 243.0 250.0 9.06 8.96 9.16 248.4 250.0

AROCLOR AVG: 246.5 CAL %D = -1.4

Date Analyzed:09/17/15

Lab Standard ID: AR1660 Time Analyzed :1132

	RT W	MDOM	CALC	NOM	
RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=====	=====	=====	======	======	====
12.40	12.30	12.50	265.4	250.0	6.2
13.08	12.98	13.18	262.2	250.0	4.9
13.46	13.36	13.56	259.5	250.0	3.8
13.56	13.46	13.66	253.8	250.0	1.5
13.96	13.86	14.06	257.0	250.0	2.8
	===== 12.40 13.08 13.46 13.56	RT FROM  ===== 12.40 12.30 13.08 12.98 13.46 13.36 13.56 13.46	RT FROM TO  ===== ==== ========================	RT FROM TO AMOUNT (ng)  ====== 12.40 12.30 12.50 265.4 13.08 12.98 13.18 262.2 13.46 13.36 13.56 259.5 13.56 13.46 13.66 253.8	RT FROM TO AMOUNT (ng) (ng)  ====== 12.40 12.30 12.50 265.4 250.0 13.08 12.98 13.18 262.2 250.0 13.46 13.36 13.56 259.5 250.0 13.56 13.46 13.66 253.8 250.0

AROCLOR AVG: 259.6 CAL %D = 3.8

Lab Name: ANALYTICAL RESOURCES INC Client: Jo

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/17/15

Lab Standard ID: AR1254

Time Analyzed:0840

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
			'	(ng)	(ng)	
=======================================	=====	=====	=====	=======	=======	=====
Aroclor-1254-1	11.21	11.11	11.31	248.9	250.0	-0.4
Aroclor-1254-2	11.31	11.21	11.41	252.3	250.0	0.9
Aroclor-1254-3	11.75	11.65	11.85	255.0	250.0	2.0
Aroclor-1254-4	11.90	11.80	12.00	249.3	250.0	-0.3
Aroclor-1254-5	12.68	12.58	12.78	244.8	250.0	-2.1
	•	•	•		•	•

AROCLOR AVG: 250.1 CAL %D = 0.0

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/17/15

Lab Standard ID: AR1660

Time Analyzed:0901

COMPOUND/PEAK NO.	RT	RT WI FROM	NDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
	=====	=====	=====	=======	=======	=====
Aroclor-1016-1	8.77	8.67	8.87	237.4	250.0	-5.0
Aroclor-1016-2	9.48	9.38	9.58	243.2	250.0	-2.7
Aroclor-1016-3	9.90	9.80	10.00	245.5	250.0	-1.8
Aroclor-1016-4	10.45	10.35	10.55	189.6	250.0	-24.2
	•	•	1	•	•	•

AROCLOR AVG: 228.9 CAL %D = -8.4

Date Analyzed: 09/17/15

Lab Standard ID: AR1660

Time Analyzed:0901

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
	=====	=====	=====	======	=======	=====
Aroclor-1260-1	13.00	12.90	13.10	226.1	250.0	-9.6
Aroclor-1260-2	13.66	13.56	13.76	230.1	250.0	-8.0
Aroclor-1260-3	14.09	13.99	14.19	223.9	250.0	-10.4
Aroclor-1260-4	14.14	14.04	14.24	227.8	250.0	-8.9
	•	•		•	'	•

AROCLOR AVG: 227.0 CAL %D = -9.2

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed :09/17/15

Lab Standard ID: AR1248

Time Analyzed :1111

	K.T. M.	INDOM	CALC	NOM	
RT	FROM	TO	AMOUNT	AMOUNT	%D
= ======	=====	=====	(ng)	(11g <i>)</i>	=====
9.47	9.37	9.57	240.5	250.0	-3.8
10.45	10.35	10.55	193.2	250.0	-22.7
10.98	10.88	11.08	237.7	250.0	-4.9
11.34	11.24	11.44	234.5	250.0	-6.2
	= ===== 9.47 10.45 10.98	RT FROM  = ===== 9.47 9.37  10.45 10.35  10.98 10.88	RT FROM TO  = ===== 9.47 9.37 9.57	RT FROM TO AMOUNT (ng)  = ====== 9.47 9.37 9.57 240.5  - 10.45 10.35 10.55 193.2  - 10.98 10.88 11.08 237.7	RT FROM TO AMOUNT (ng) (ng)  = =====

AROCLOR AVG: 226.5 CAL %D = -9.4

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/17/15

Lab Standard ID: AR1660

Time Analyzed :1132

		RT WI	NDOW	CALC	MOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=======================================	== =====	=====	=====	======	=======	=====
Aroclor-1016-1	8.77	8.67	8.87	236.5	250.0	-5.4
Aroclor-1016-2	9.48	9.38	9.58	242.2	250.0	-3.1
Aroclor-1016-3	9.90	9.80	10.00	243.0	250.0	-2.8
Aroclor-1016-4	10.45	10.35	10.55	189.1	250.0	-24.4

AROCLOR AVG: 227.7 CAL %D = -8.9

Date Analyzed: 09/17/15

Lab Standard ID: AR1660

Time Analyzed :1132

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	TRUOMA	TRUOMA	%D
	•	'		(ng)	(ng)	
=======================================	=====	=====	=====	=======	======	=====
Aroclor-1260-1	13.00	12.90	13.10	231.3	250.0	-7.5
Aroclor-1260-2	13.66	13.56	13.76	230.1	250.0	-7.9
Aroclor-1260-3	14.09	13.99	14.19	214.7	250.0	-14.1
Aroclor-1260-4	14.14	14.04	14.24	218.5	250.0	-12.6
	•	•				

AROCLOR AVG: 223.7 CAL %D = -10.5

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB5 ID: 0.53 (mm)

Instrument ID: ECD7

Init. Calib. Date: 08/03/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

			1		IS1		IS2	
			İ		AREA	RT	AREA	RT
			======	=====				======
			ICAL	MIDPT	6328212	3.263	5068453	15.102
			UPPER	LIMIT	12656424	3.363	10136906	15.202
			LOWER	LIMIT	3164106	3.163	2534226	
			j		i.		•	i i
1	CLIENT	LAB	DATE		IS1		IS2	i
i	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
İ		=======		=====	=======	======		=====
01	ZZZZZ	ZZZZZ	08/03/15	1716	6222621	3.258	5047030	15.102
02		0.25PPMAR166	08/03/15	1737	6328212	3.263	5068453	15.102
03		0.02PPMAR166	08/03/15	1758	6326177	3.262	5154907	15.102
04		0.05PPMAR166		1820	6210580	3.264	5033371	15.102
05		1PPMAR1660	08/03/15	1841	6160991	3.266	4985647	15.103
06		0.1PPMAR1660	08/03/15	1902	6344317	3.268	5407220	15.103
07		0.5PPMAR1660	08/03/15	1924	6159955	3.267	5303929	15.103
08		AR1242	08/03/15	1945	6219986	3.265	5066767	15.103
09		AR1248	08/03/15	2007	6249050	3.265	5356854	15.103
10		AR1254	08/03/15	2028	6326911	3.267	5032449	15.103
11		AR2162	08/03/15	2049	6246099	3.266	4938617	15.103
12		AR3268	08/03/15	2111	6259531	3.265	5003661	15.103
13	ZZZZZ	ZZZZZ	08/03/15	2132	6338133	3.267	5037306	15.103
14	ZZZZZ	ZZZZZ	08/03/15	2153	6038309	3.262	5048403	15.103
15	ZZZZZ	ZZZZZ	08/03/15	2214	6208035	3.265	5032536	15.103
16	ZZZZZ	ZZZZZ	08/03/15	2236	6278544	3.265	5100405	15.103
17	ZZZZZ	ZZZZZ	08/03/15	2257	6251565	3.264	5061467	15.103
18	ZZZZZ	ZZZZZ	08/03/15	2318	6317415	3.264	5061451	15.102
19	ZZZZZ	ZZZZZ	09/17/15	0715	6911781	3.261	5708686	15.095
20	ZZZZZ	ZZZZZ	09/17/15	0736	9352865	3.261	6538565	15.094
21	ZZZZZ	ZZZZZ	09/17/15	0757	7250319	3.278	5643036	15.094
22	ZZZZZ	ZZZZZ	09/17/15	0818	8317948	3.273	5780200	15.095
23		AR1254	09/17/15	0840	8865813	3.276	6823317	15.095
24		AR1660	09/17/15	0901	8353074	3.279	6172946	15.096
25	AMO6MBS1	AMO6MBS1	09/17/15	0946	7334837	3.237	5622694	15.093
26	AMO6LCSS1	AMO6LCSS1	09/17/15	1007	7562813	3.262	5761936	15.094
27	CMP12-B07-1+	AMO6A	09/17/15	1028	7549776	3.271	4700128	15.095
28	CMP24-B10-1+	AMO6B	09/17/15	1050	7309118	3.274	4974244	15.096
29		AR1248	09/17/15	1111	10670433	3.277	7976415	15.096
30	1	AR1660	09/17/15	1132	8566609	3.278	6444618	15.096
	<u> </u>			l	l		l	l

* Indicates value outside QC Limits
page 1 of 1 FORM VIII PCB

1

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMO6

Project: JFOS3

GC Column: ZB35 ID: 0.53 (mm)

Instrument ID: ECD7

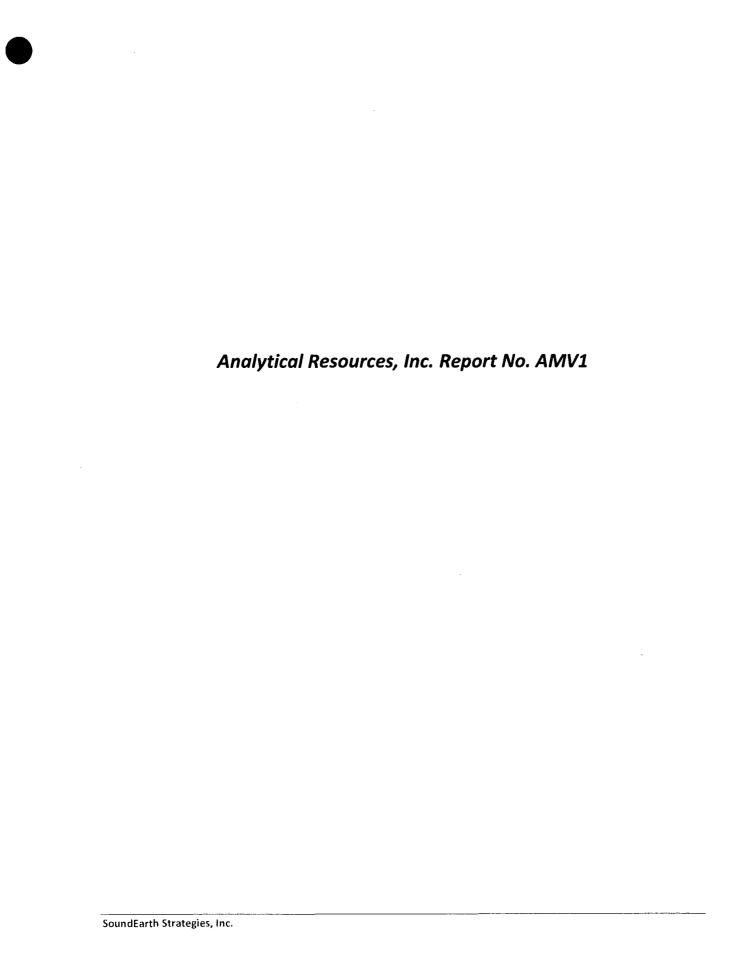
Init. Calib. Date: 08/03/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

					IS1		IS2	
			i		AREA	RT	AREA	RT
			j======		=======	======	========	
			ICAL	MIDPT	12901249	4.365	7598346	15.906
			UPPER	LIMIT	25802498	4.465	15196692	16.006
			LOWER	LIMIT	6450624	4.265	3799173	15.806
			i_					
ĺ	CLIENT	LAB	DATE		IS1		IS2	
1	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
	=========		========	=====	=======	======	=======	=====
01	ZZZZZ	ZZZZZ	08/03/15	1716	12615423	4.360	7577981	15.906
02		0.25PPMAR166	08/03/15	1737	12901249	4.365	7598346	15.906
03		0.02PPMAR166	08/03/15	1758	12889538	4.366	7674080	15.906
04		0.05PPMAR166	08/03/15	1820	12701605	4.367	7596138	15.906
05		1PPMAR1660	08/03/15	1841	12722963	4.369	7648810	15.907
06		0.1PPMAR1660	08/03/15	1902	13013744	4.371	7786984	15.907
07		0.5PPMAR1660	08/03/15	1924	12706249	4.370	7776969	15.907
80		AR1242	08/03/15	1945	12825517	4.369	7804063	15.906
09		AR1248	08/03/15	2007	12932061	4.369	7871936	15.906
10		AR1254	08/03/15	2028	13098041	4.370	7793570	15.907
11		AR2162	08/03/15	2049	12808024	4.369	7735916	15.907
12		AR3268	08/03/15	2111	12831845	4.369	7828166	15.907
13	ZZZZZ	ZZZZZ	08/03/15	2132	13048327	4.369	7840797	15.907
14	ZZZZZ	ZZZZZ	08/03/15	2153	12451023	4.366	7728754	15.907
15	ZZZZZ	ZZZZZ	08/03/15	2214	12732082	4.367	7695088	15.907
16	ZZZZZ	ZZZZZ	08/03/15	2236	12892489	4.368	7804248	15.906
17	ZZZZZ	ZZZZZ	08/03/15	2257	12666986	4.367	7848857	15.907
18	ZZZZZ	ZZZZZ	08/03/15	2318	12781896	4.367	7841933	15.907
19	ZZZZZ	ZZZZZ	09/17/15	0715	12407456	4.348	7070938	15.903
20	ZZZZZ	ZZZZZ	09/17/15	0736	15218750	4.366	8646569	15.904
21	ZZZZZ	ZZZZZ	09/17/15	0757	12088231	4.379	7265032	15.904
22	ZZZZZ	ZZZZZ	09/17/15	0818	14001915	4.381	8057046	15.904
23		AR1254	09/17/15	0840	15110619	4.384	9360168	15.905
24		AR1660	09/17/15	0901	14457436	4.388	8857258	15.906
25	AMO6MBS1	AMO6MBS1	09/17/15	0946	12813597	4.320	7555443	15.899
26	AMO6LCSS1	AMO6LCSS1	09/17/15	1007	12946274	4.368	7741969	15.904
27	CMP12-B07-1+	AMO6A	09/17/15	1028	11824939	4.378	6302950	15.905
28	CMP24-B10-1+	AMO6B	09/17/15	1050	12176985	4.384	6517878	15.905
29		AR1248	09/17/15	1111	17929879	4.387	10130221	15.906
30		AR1660	09/17/15	1132	14800919	4.388	8302187	15.906
					<u></u>			

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

* Indicates value outside QC Limits
page 1 of 1 FORM VIII PCB





23 September 2015

Dee Gardner Sound Earth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

**RE: JFOS3** 

ARI Job No.: AMV1

Dear Dee:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. received five soil samples on September 21, 2015. The samples were analyzed for PCBs as requested.

These analyses proceeded without incident of note.

If you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYPICAL RESOURCES, INC.

Mark D. Harris ' Project Manager 206/695-6210 markh@arilabs.com

cc: Miles Dyer, Jorgensen Forge file AMV1

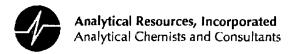
**Enclosures** 

Chain of Custoo	y Record & Laboratory	/ Analysis Request
-----------------	-----------------------	--------------------

MINOL			24 Hours	•	Page:	١	of	1			Analyti	cal Resources, Incorporated cal Chemists and Consultants outh 134th Place, Suite 100
ARI Client Company: JORGENSEN FORGE CO	Phone: ORGE CORPORATION 206,762,1100			Date: 9/21/15 Ice Present? YES			25		a, WA 98168 95-6200 206-695-6201 (fax)			
Client Contact: MILES DYER	,				No. of Coolers:	1	Coole Temp	š: 5.	7			rilabs.com
Client Project Name: JF053								Analysis f	Requested		T	Notes/Comments
	Samplers: -	J. LOEF	FLER		7808 8087							STAGE 2B REPORTING PER
Sample ID	Date	Time	Matrix	No. Containers	PCBs EPA 6					٠.	٠,	SAP/QAPP
266-811-2+06	9/21/15	1205	SOIL	1	×							
266-514-2+07		1213	SOIL	1	X							
266-W13-2+07		1215	SOIL	1	×							
266-N12-2+07		1218	SOIL	1	Χ							
266-E15-2+c7	L	1226	SOIL	1	X							
					···							
					<del></del>	H	9/2	1/15				
					U	V()						·
					٠							
Comments/Special Instructions CC: DEE GARDNER AT	Relinquished by (Signature)	Z-X	2	Received by: (Signature)			-	Relinquished (Signature)	l by:		Received by (Signature)	<i>r</i> :
SOUNDEARTH	Printed Name:	ian los	FFLER	Printed Name:	hi	v Am		Printed Nam	8:		Printed Nam	ne:
Com	Company:	NEAPTI	4	Company:	mi		<del>_</del>	Company:			Company:	
jloeffler@soundearthinc.com	Date & Time: 9/21/	15@11	322	Date & Time:	Jul.	5 E	322	Date & Time			Date & Time	9:

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or cosigned agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.



# **Cooler Receipt Form**

ARI Client Togensen	Forge Cort.	Project Name: JFOS	3	
COC No(s):	MA	Delivered by: Fed-Ex UPS Couri	er Hand Delivered Other	<del></del>
Assigned ARI Job No:	MVI	Tracking No:	s. (a.i.a. 90, i.a. a.a. a.	
Preliminary Examination Phase		Tracking 140.		
Were intact, properly signed and	dated custody seals attached to	o the outside of to cooler?	YES	NO
Were custody papers included w	rith the cooler?	********	Æ	NO
Were custody papers properly fil	lled out (ink, signed, etc.)		/Yes	NO
Temperature of Cooler(s) (°C) (r Time:	ecommended 2.0-6.0 °C for che	2.1		
If cooler temperature is out of co	mpliance fill out form 00070F	-19	Temp Gun ID#: 200	<u>1515</u>
Cooler Accepted by:	09	Date:	1327	-
	Complete custody forms	and attach all shipping documents	·	
Log-In Phase:			<del>.</del>	
Was a temperature blank include	ed in the cooler?		YES	( ON )
•		p Wet lige Gel Packs Badgles Foam B	lock Paper Other:	
Was sufficient ice used (if appro			NA TES	NO
Were all bottles sealed in individ	ual plastic bags?			NO
Did all bottles arrive in good con-	dition (unbroken)?		YES	- NO
Were all bottle labels complete a	and legible?	•••••	YES	NO
Did the number of containers list	ed on COC match with the numi	ber of containers received?	(YES)	NO
Did all bottle labels and tags agr	ee with custody papers?	,	(YES)	NO
Were all bottles used correct for	the requested analyses?	.,,,	(YES)	NO
Do any of the analyses (bottles)	require preservation? (attach pre	eservation sheet, excluding VOCs)	(NA) YES	NO
Were all VOC vials free of air bu	bbles?		(NA) YES	NO
Was sufficient amount of sample	sent in each bottle?		(FES)	· NO
Date VOC Trip Blank was made	at ARI		MÀ	
Was Sample Split by ARI:	YES Date/Time:	Equipment:	Split by:_	· · · · · · · · · · · · · · · · · · ·
Samples Logged by:	A Date	: 92115 Time:	(341)	
. •••	** Notify Project Manage	er of discrepancies or concerns **		
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on C	OC
	<u> </u>			
ļ				
Additional Notes, Discrepanci				
By: D	ate:			
Small Air Bubbles   Peabub		Small → "sm" (< 2 mm)		
		Peabubbles -> "pb" ( 2 to < 4 mm )		<del>,</del>
		Large → "lg" (4 to < 6 mm)	<del></del>	
		Headspace → "hs" (>6 mm)		

# Sample ID Cross Reference Report



ARI Job No: AMV1 Client: Jorgensen Forge Project Event: N/A Project Name: JFOS3

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	266-B11-2-06	AMV1A	15-16831	Soil	09/21/15 12:05	09/21/15 13:22
2.	266-S14-2-07	AMV1B	15-16832	Soil	09/21/15 12:13	09/21/15 13:22
3.	266-W13-2+07	AMV1C	15-16833	Soil	09/21/15 12:15	09/21/15 13:22
4.	266-N12-2+07	AMV1D	15-16834	Soil	09/21/15 12:18	09/21/15 13:22
5.	266-E15-2-07	AMV1E	15-16835	Soil	09/21/15 12:26	09/21/15 13:22

Printed 09/21/15 Page 1 of 1

# Data Reporting Qualifiers Effective 2/14/2011

# **Inorganic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but ≥ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

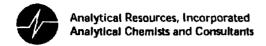
# **Organic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
- Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).



- S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- M2 The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (Dioxin/Furan analysis only)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated diphenyl ethers. (Dioxin/Furan analysis only)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (Dioxin/Furan analysis only)

Page 2 of 3



# **Geotechnical Data**

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- W Weight of sample in some pipette aliquots was below the level required for accurate weighting



Page 1 of 1

Lab Sample ID: AMV1A LIMS ID: 15-16831

Matrix: Soil

Data Release Authorized:

Reported: 09/22/15

Date Extracted: 09/21/15
Date Analyzed: 09/22/15 12:08
Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-B11-2+06

SAMPLE

QC Report No: AMV1-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/21/15 Date Received: 09/21/15

Sample Amount: 6.59 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 12.7%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	15	< 15 U
53469-21-9	Aroclor 1242	15	< 15 U
12672-29-6	Aroclor 1248	15	< 15 U
11097-69-1	Aroclor 1254	15	< 15 U
11096-82-5	Aroclor 1260	15	61
11104-28-2	Aroclor 1221	15	< 15 U
11141-16-5	Aroclor 1232	15	< 15 U
37324-23-5	Aroclor 1262	15	< 15 U
11100-14-4	Aroclor 1268	15	< 15 U

Reported in µg/kg (ppb)

#### PCB Surrogate Recovery

Decachlorobiphenyl	77.8%
Tetrachlorometaxvlene	68.8%



Page 1 of 1

Lab Sample ID: AMV1B LIMS ID: 15-16832

Matrix: Soil

Data Release Authorized:

Reported: 09/22/15

Date Extracted: 09/21/15 Date Analyzed: 09/22/15 12:29 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-S14-2+07

SAMPLE

QC Report No: AMV1-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/21/15 Date Received: 09/21/15

Sample Amount: 6.53 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 13.3%

CAS Number	Analyte	TOO	Result
12674-11-2	Aroclor 1016	15	< 15 U
53469-21-9	Aroclor 1242	15	< 15 U
12672-29-6	Aroclor 1248	15	< 15 U
11097-69-1	Aroclor 1254	15	< 15 U
11096-82-5	Aroclor 1260	15	< 15 U
11104-28-2	Aroclor 1221	15	< 15 U
11141-16-5	Aroclor 1232	15	< 15 U
37324-23-5	Aroclor 1262	15	< 15 U
11100-14-4	Aroclor 1268	15	< 15 U

Reported in µg/kg (ppb)

#### PCB Surrogate Recovery

Decachlorobiphenyl	72.8%
Tetrachlorometaxvlene	62.0%



Page 1 of 1

Lab Sample ID: AMV1C LIMS ID: 15-16833

Matrix: Soil

Data Release Authorized:

Reported: 09/22/15

Date Extracted: 09/21/15 Date Analyzed: 09/22/15 12:50 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-W13-2+07

SAMPLE

QC Report No: AMV1-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/21/15 Date Received: 09/21/15

Sample Amount: 6.21 g-dry-wt

Final Extract Volume: 5.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 17.7%

CAS Number	Analyte	TOO	Result
12674-11-2	Aroclor 1016	16	< 16 U
53469-21-9	Aroclor 1242	16	< 16 U
12672-29-6	Aroclor 1248	16	< 16 U
11097-69-1	Aroclor 1254	16	< 16 U
11096-82-5	Aroclor 1260	16	< 16 U
11104-28-2	Aroclor 1221	16	< 16 U
11141-16-5	Aroclor 1232	16	< 16 U
37324-23 <b>-</b> 5	Aroclor 1262	16	< 16 U
11100-14-4	Aroclor 1268	16	< 16 U

Reported in µg/kg (ppb)

# PCB Surrogate Recovery

Decachlorobiphenyl	71.0%
Tetrachlorometaxylene	62.8%

FORM I



Page 1 of 1

Lab Sample ID: AMV1D LIMS ID: 15-16834

Matrix: Soil

Data Release Authorized:

Reported: 09/22/15

Date Extracted: 09/21/15 Date Analyzed: 09/22/15 13:12 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes

Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-N12-2+07

SAMPLE

QC Report No: AMV1-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/21/15 Date Received: 09/21/15

Sample Amount: 6.87 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 9.0%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	15	< 15 U
53469-21-9	Aroclor 1242	15	< 15 U
12672-29-6	Aroclor 1248	15	< 15 U
11097-69-1	Aroclor 1254	51	< 51 Y
11096-82-5	Aroclor 1260	15	230
11104-28-2	Aroclor 1221	15	< 15 U
11141-16-5	Aroclor 1232	15	< 15 U
37324-23-5	Aroclor 1262	15	< 15 U
11100-14-4	Aroclor 1268	15	< 15 U

Reported in µg/kg (ppb)

#### PCB Surrogate Recovery

Decachlorobiphenyl	77.5%
Tetrachlorometaxylene	67.5%



Page 1 of 1

Lab Sample ID: AMV1E LIMS ID: 15-16835

Matrix: Soil

Data Release Authorized:

Reported: 09/22/15

Date Extracted: 09/21/15 Date Analyzed: 09/22/15 13:33 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: 266-E15-2+07

SAMPLE

QC Report No: AMV1-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/21/15 Date Received: 09/21/15

Sample Amount: 6.49 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 13.7%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	15	< 15 U
53469-21-9	Aroclor 1242	15	< 15 U
12672-29-6	Aroclor 1248	15	< 15 U
11097-69-1	Aroclor 1254	15	< 15 U
11096-82-5	Aroclor 1260	15	30
11104-28-2	Aroclor 1221	15	< 15 U
11141-16-5	Aroclor 1232	15	< 15 U
37324-23-5	Aroclor 1262	15	< 15 U
11100-14-4	Aroclor 1268	15	< 15 U

Reported in µg/kg (ppb)

## PCB Surrogate Recovery

Deca	achlorobip	henyl	73.0%
Tet:	rachlorome	taxylene	64.2%



## SW8082/PCB SOIL/SOLID/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: AMV1-Jorgensen Forge Project: JFOS3

Client ID	DCBP % REC	DCBP	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-092115	77.0%	59 <b>-</b> 115	64.2%	58-112	0
266-B11-2+06	77.8%	47-120	68.8%	53-116	0
266-S14-2+07	72.8%	47-120	62.0%	53-116	0
266-W13-2+07	71.0%	47-120	62.8%	53-116	0
266-N12-2+07	77.5%	47-120	67.5%	53-116	0
266-E15-2+07	73.0%	47-120	64.2%	53-116	0

Microwave (MARS) Control Limits PCBSMI

Prep Method: SW3546

Log Number Range: 15-16831 to 15-16835



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Page 1 of 1

Lab Sample ID: LCS-092115 LIMS ID: 15-16831

Matrix: Soil

Data Release Authorized: //

Reported: 09/22/15

Date Extracted: 09/21/15 Date Analyzed: 09/22/15 13:54 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: LC8-092115

LAB CONTROL

QC Report No: AMV1-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	395	500	79.0%
Aroclor 1260	478	500	95.6%

#### PCB Surrogate Recovery

Decachlorobiphenyl	78.0%
Tetrachlorometaxylene	65.8%

Results reported in µg/kg (ppb)

# PCB METHOD BLANK SUMMARY

BLANK NO.

AMV1MBS1

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMV1

Project: JFOS3

Lab Sample ID: AMV1MBS1

Lab File ID: 09221517

Date Extracted: 09/21/15

Matrix: SOLID

Date Analyzed: 09/22/15

Instrument ID: ECD7

Time Analyzed: 1146

GC Columns: ZB5/ZB35

# THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
	S=====================================	========	========
01	266-B11-2+06	AMV1A	09/22/15
02	266-S14-2+07	AMV1B	09/22/15
03	266-W13-2+07	AMV1C	09/22/15
04	266-N12-2+07	AMV1D	09/22/15
05	266-E15-2+07	AMV1E	09/22/15
06	AMV1LCSS1	AMV1LCSS1	09/22/15

ALL RUNS ARE DUAL COLUMN



Page 1 of 1

Lab Sample ID: MB-092115

LIMS ID: 15-16831

Matrix: Soil

Data Release Authorized:

Reported: 09/22/15

Date Extracted: 09/21/15 Date Analyzed: 09/22/15 11:46 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes

Florisil Cleanup: No

Sample ID: MB-092115 METHOD BLANK

QC Report No: AMV1-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g
Final Extract Volume: 5.00 mL
Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	TOO	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469~21-9	Aroclor 1242	. 20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U
37324-23-5	Aroclor 1262	20	< 20 U
11100-14-4	Aroclor 1268	20	< 20 U

Reported in µg/kg (ppb)

## PCB Surrogate Recovery

Decachlorobiphenyl	77.0%
Tetrachlorometaxylene	64.2%

FORM I

# 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Cl:

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

	RT WIN		•	•		•	•		•		•		•		:
TC	X 6.17- 6.37  B 14.74-14.94	0.4595	0.5114	1	0.5438	0.5434	1	0.5583	1	0.5704	-	0.5312	1	7.6	ļ

rocl	or-1016	- 1	LVL1		LVL2	- 1	LVL3	- 1	LVL4		LVL5	ı	LVL6	MEAN		*RSD
eak	RT WI	N į	.02		0.05	I	0.1	I	.25	-	0.5	-	1.0		-	R^2
1	8.18- 8.	 38	0.0127	 	0.0137		0.0140		0.0130		0.0125		0.0119	0.0129		6.0
2	8.66- 8.	86	0.0388		0.0418		0.0425		0.0396	- 1	0.0390	1	0.0384	0.0400	1	4.3
3	8.96- 9.	16	0.0123	- {	0.0144	- }	0.0149	- {	0.0140	- {	0.0138	1	0.0134	0.0138	1	6.5
4	9.75- 9.	95	0.0139	- 1	0.0149	- [	0.0160	- 1	0.0148	- 1	0.0146	1	0.0141	0.0147	- 1	4.9

AROCLOR AVERAGE %RSD = 5.4

Aroclor	-1260	LVL1		LVL2		LAT3		LVL4	- 1	LVL5		LVL6	- 1	MEAN	%F	RSD
Peak	RT WIN	.02	}	0.05	1	0.1	Ì	.25	1	0.5	1	1.0	1		) F	₹^2
1 12.	30-12.50	0.0491		0.0528		0.0511		0.0511		0.0472	 	0.0497		0.0502	3	3.9
2 12.	98-13.18	0.1300	İ	0.1509	1	0.1533	-	0.1635	- 1	0.1585		0.1747		0.1551	9	9.6
3 13.	36-13.56	0.0548	1	0.0622	1	0.0625	-1	0.0650	-	0.0614	ļ	0.0659	-	0.0620	1 6	5.4
4 13.	46-13.66	0.0356	-	0.0404	-1	0.0408	١	0.0424		0.0400	1	0.0425	-	0.0403	6	5.3
5 13.	86-14.06	0.0162	1	0.0197	Ì	0.0199	- 1	0.0205	1	0.0194	1	0.0207	-1	0.0194	8	8.4

AROCLOR AVERAGE %RSD = 6.9

# 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AMV1 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

1	LVL2			LVL5			,
TCX 6.56- 6.76	•	•	•	•	•	•	

roclor-1016	LVL1	LVL2	LVI	L3 LVL4	LVL5	LVL6	MEAN	%RSD
Peak RT WIN	.02	0.05	1 0.	.1 .25	0.5	1.0	1	R^2
1 8.68- 8.88	0.0481	0.0478	0.046	6   0.0414	0.0386	0.0357	0.0430	12.2
2 9.38- 9.58	0.0957	0.0955	0.095	55   0.0864	0.0833	0.0792	0.0893	8.2
3 9.80-10.00	0.0250	0.0256	0.025	55   0.0230	0.0217	0.0205	0.0236	9.1
4 10.35-10.55	0.0339	0.0347	0.033	9   0.0302	0.0285	0.0267	0.0313	10.5

AROCLOR AVERAGE %RSD = 10.0

Aroclor-	1260	LVL1		LVL2		LVL3	- 1	LVL4		LVL5		LVL6		Mean	- 1	*RSD
Peak	RT WIN	.02	ļ	0.05												
1 12.9	0-13.10	0.0940	1	0.0922												
2 13.5	6-13.76	0.1992	1	0.2005	1	0.1998	- 1	0.1867	-1	0.1792	1	0.1768	1	0.1904	- 1	5.
3 13.9	9-14.19	0.0651	- 1	0.0649	-1	0.0637	- 1	0.0574		0.0536	-	0.0519	-	0.0594	- 1	10.0
4 14.0	4-14.24	0.1332	- 1	0.1340	-1	0.1333	- 1	0.1212	-	0.1155	- 1	0.1129	l	0.1250	1	7.

AROCLOR AVERAGE %RSD = 8.7

FORM VI PCB-1

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

Calibration Date: 08/03/15

	Aroclo	or-1221	1
Pook	RT	RT WIN	Cal Factor
Peak		KI WIN	
1	4.946	4.85- 5.05	0.00300
2	6.923		0.00486
3	7.0 <b>47</b>	6.95- 7.15	0.01455
	Aroclo	r-1232	
Peak	RT	RT WIN	Cal Factor
Peak		AI WIN	
1	4.946	4.85- 5.05	0.00172
2	7.046	6.95- 7.15	0.00980
3 4	8.759 9.658	8.66- 8.86 9.56- 9.76	0.01696 0.00541
	<b></b>	J.30- J.70	
	Aroclo	r-1242	Cal
Peak	RT	RT WIN	Factor
	8.766	8.67- 8.87	0.03076
2 3	9.065 10.299	8,96- 9.16 10.20-10.40	0.01109 0.01405
	10.545	10.45-10.64	0.01578
	Aroglo	or-1248	
	ALOUIC	T 1510	Cal
Peak	RT	RT WIN	Factor
	0 405	0 21 0 51	0.00882
1 2	9.405 9.849	9.31- 9.51 9.75- 9.95	0.02086
1	10.298		0.02446
1	10.544		0.02496

FORM VI PCB-2A

page 1 of 2

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AMV1 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Calibration Date: 08/03/15

	Aroclo	or-1254	Cal
Peak	RT	RT WIN	Factor
1	0.307	10.21-10.41	0.01523
	0.627	10.53-10.73	0.02246
	1.008	10.91-11.11	0.01795
L	1.146		0.03393
) 5 1	1.859	11.76-11.96	0.02473
]	WLOGIC	or-1262	Cal
Peak	יזים	RT WIN	Factor
Peak		KI MIN	Factor
1 1	2.408	12.31~12.51	0.10383
2 1	3.085		0.27054
3 1	3.461	13.36-13.56	0.07188
4 1	3.625	13.52-13.72	0.12224
5 1	4.171	14.07-14.27	0.10332
\ <b></b>			
} .	Aroclo	r-1268	
_			Cal
Peak	RT	RT WIN	Factor
	<del>-</del>	40 46 40 66	
	3.561		0.24308
	3.623	13.52-13.72	0.23035
	3.949		0.20684
4 1	4.555	14.46-14.66	0.63060

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AMV1 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 08/03/15

	Aroclo	r-1221	Cal
Peak	RT	RT WIN	Factor
1	5.744	5.64- 5.84	0.00821
2	7.471	7.37- 7.57	0.01368
3	7.773	7.67- 7.87	0.00799
4	7.913	7.81- 8.01	0.02412
	 Aroclo	 r-1232	
			Cal
Peak	RT	RT WIN	Factor
1	5.7 <b>44</b>	5.64- 5.84	0.00506
2	7.912	7.81- 8.01	0.01726
_	8.762	8.66- 8.86	0.01985
4	9.890	9.79- 9.99	0.01037
	Aroclo	r-1242	Cal
Peak	RT	RT WIN	Factor
1	8.777	8.68- 8.88	0.03253
	9.483	9.38- 9.58	0.06762
	0.903		0.02930
4 1	1.346	11.25-11.45	0.02943
	Aroclo		
		<b></b>	Cal
Peak	RT	RT WIN	Factor
	9.474	9.37- 9.57	0.04417
	0.449	10.35-10.55	0.03719
	0.983	10.88-11.08	0.03822
4 1	1.345	11.24-11.44	0.04818
1			

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN

ARI Job No.: AMV1 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

A	roclo	r-1254	0-1
Peak	RT	RT WIN	Cal Factor
1 11.	.215	11.11-11.31	0.04173
	.313	11.21-11.41	0.01974
	752	11.65-11.85	0.03299
4 11.	904	11.80-12.00	0.06503
5 12	684	12.58-12.78	0.04305
Aı	COCTO	r-1262	Cal
Peak	DO	RT WIN	Factor
reak	KI	KI MIN	Factor
1 12	.993	12.89-13.09	0.15518
2 13	428	13.33-13.53	0.14324
3 13	656	13.56-13.76	0.29125
4 14	091	13.99-14.19	0.12507
5 14	.686	14.59-14.79	0.09594
<b></b> -			
A:	coclo	r-1268	
			Cal
Peak	RT	RT WIN	Factor
1 14	000	13.99-14.19	0.21797
	144	14.04-14.24	0.21797
	454	14.35-14.55	0.20390
	.033		0.46628

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/22/15

Lab Standard ID: AR1248

Time Analyzed :1104

COMPOUND/PEAK NO.	RT	RT WI FROM	INDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	*D
	=====	*====	=====	=======	=======	====
Aroclor-1248-1	9.41	9.31	9.51	268.1	250.0	7.2
Aroclor-1248-2	9.85	9.75	9.95	276.6	250.0	10.6
Aroclor-1248-3	10.30	10.20	10.40	284.5	250.0	13.8
Aroclor-1248-4	10.54	10.44	10.64	294.8	250.0	17.9
	•	•		•		•

AROCLOR AVG: 281.0 CAL %D = 12.4

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/22/15

Lab Standard ID: AR1660

Time Analyzed: 1125

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	TRUOMA	TRUDOMA	%D
	ĺ			(ng)	(ng)	
=======================================	:   ======	z====	=====	======		=====
Aroclor-1016-1	8.28	8.18	8.38	256.3	250.0	2.5
Aroclor-1016-2	8.77	8.66	8.86	254.8	250.0	1.9
Aroclor-1016-3	9.06	8.96	9.16	258.3	250.0	3.3
Aroclor-1016-4	9.85	9.75	9.95	264.5	250.0	5.8

AROCLOR AVG: 258.5 CAL %D = 3.4

Date Analyzed: 09/22/15

Lab Standard ID: AR1660

Time Analyzed :1125

OMPOUND/PEAK NO.	RT	RT W	INDOW TO	CALC AMOUNT (ng)	MOM TNUOMA (pg)	%D
	= =====================================	=====	=====	=======		=====
oclor-1260-1	12.41	12.30	12.50	300.9	250.0	20.4
oclor-1260-2	13.08	12.98	13.18	295.7	250.0	18.3
oclor-1260-3	13.46	13.36	13.56	292.8	250.0	17.1
oclor-1260-4	13.56	13.46	13.66	287.5	250.0	15.0
oclor-1260-5	13.96	13.86	14.06	285.3	250.0	14.1
	<del></del> !	1				

AROCLOR AVG: 292.4 CAL %D = 17.0

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/22/15

Lab Standard ID: AR1660

Time Analyzed: 1415

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	TUOMA	TUODMA	%D
				(ng)	(ng)	
=======================================	=====	=====	=====	======	======	=====
Aroclor-1016-1	8.28	8.18	8.38	256.0	250.0	2.4
Aroclor-1016-2	8.76	8.66	8.86	255.1	250.0	2.0
Aroclor-1016-3	9.06	8.96	9.16	259,5	250.0	3.8
Aroclor-1016-4	9.85	9.75	9.95	266.4	250.0	6.5
Aroctor-1016-4	9.85	9.75	9.95	266.4	250.0	

AROCLOR AVG: 259.2 CAL %D = 3.7

Date Analyzed:09/22/15

Lab Standard ID: AR1660

Time Analyzed: 1415

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	<b>%</b> D
	=====	=====	======	=======	======	=====
Aroclor-1260-1	12.40	12.30	12.50	287.1	250.0	14.8
Aroclor-1260-2	13.08	12.98	13.18	283.3	250.0	13.3
Aroclor-1260-3	13.46	13.36	13.56	281.9	250.0	12.7
Aroclor-1260-4	13.56	13.46	13.66	275.4	250.0	10.2
Aroclor-1260-5	13.96	13.86	14.06	277.6	250.0	11.0
	•	•	•		,	-

AROCLOR AVG: 281.1 CAL %D = 12.4

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/22/15

Lab Standard ID: AR1242

Time Analyzed: 1437

RT 1	FROM				
	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
====	=====	=====	=======	=======	=====
8.77	8.67	8.87	256.6	250.0	2.6
9.06	8.96	9.16	254.1	250.0	1.6
0.30	10.20	10.40	261.2	250.0	4.5
0.54	10.45	10.64	262.2	250.0	4.9
	9.06 0.30	9.06 8.96 0.30 10.20	9.06 8.96 9.16 0.30 10.20 10.40	8.77 8.67 8.87 256.6 9.06 8.96 9.16 254.1 0.30 10.20 10.40 261.2	8.77 8.67 8.87 256.6 250.0 9.06 8.96 9.16 254.1 250.0 0.30 10.20 10.40 261.2 250.0

AROCLOR AVG: 258.5 CAL %D = 3.4

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/22/15

Lab Standard ID: AR1248

Time Analyzed: 1104

		RT W	NDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	(ng)	%D
	=====	8=====	=====		=======	2222
Aroclor-1248-1	9.47	9.37	9.57	258.1	250.0	3.2
Aroclor-1248-2	10.45	10.35	10.55	200.7	250.0	-19.7
Aroclor-1248-3	10.98	10.88	11.08	247.8	250.0	-0.9
Aroclor-1248-4	11.34	11.24	11.44	244.1	250.0	-2.4
		•				

AROCLOR AVG: 237.7 CAL %D = -4.9

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/22/15

Lab Standard ID: AR1660

Time Analyzed: 1125

		RT W	MDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	=======	=====	======	=======	=======	# <b>==</b> ==
Aroclor-1016-1	8.78	8.68	8.88	244.3	250.0	-2.3
Aroclor-1016-2	9.48	9.38	9.58	248.8	250.0	-0.5
Aroclor-1016-3	9.90	9.80	10.00	253.7	250.0	1.5
Aroclor-1016-4	10.45	10.35	10.55	193.1	250.0	-22.8

AROCLOR AVG: 235.0 CAL %D = -6.0

Date Analyzed: 09/22/15

Lab Standard ID: AR1660

Time Analyzed: 1125

FROM	TO	AMOUNT (ng)	TMUOMA (ng)	%D
			1	ĺ
==   =====	=   =====		=======	====
00 12.9	0 13.10	272.5	250.0	9.0
66 13.5	6 13.76	251.1	250.0	0.4
09  13.9	9 14.19	232.3	250.0	-7.1
14   14.0	4   14.24	233.1	250.0	-6.7
6	12.9 56 13.5 09 13.9	00 12.90 13.10 66 13.56 13.76 09 13.99 14.19	00 12.90 13.10 272.5 66 13.56 13.76 251.1 09 13.99 14.19 232.3	00 12.90 13.10 272.5 250.0 66 13.56 13.76 251.1 250.0 99 13.99 14.19 232.3 250.0

AROCLOR AVG: 247.3 CAL %D = -1.1

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/22/15

Lab Standard ID: AR1660

Time Analyzed: 1415

)		RT W	ENDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	=====	=====		======	=======	====
Aroclor-1016-1	8.78	8.68	8.88	245.9	250.0	-1.6
Aroclor-1016-2	9.48	9.38	9.58	250.7	250.0	0.3
Aroclor-1016-3	9.90	9.80	10.00	255.6	250.0	2.2
Aroclor-1016-4	10.45	10.35	10.55	194.2	250.0	-22.3
		'	•	•		•

AROCLOR AVG: 236.6 CAL %D = -5.4

Date Analyzed :09/22/15

Lab Standard ID: AR1660

Time Analyzed: 1415

		RT W	NDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
	=====	=====	=====	=======	======	=====
Aroclor-1260-1	13.00	12.90	13.10	277.1	250.0	10.8
Aroclor-1260-2	13.66	13.56	13.76	266.6	250.0	6.6
Aroclor-1260-3	14.09	13.99	14.19	247.9	250.0	-0.8
Aroclor-1260-4	14.14	14.04	14.24	247.5	250.0	-1.0
	•	•				

AROCLOR AVG: 259.8 CAL %D = 3.9

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/22/15

Lab Standard ID: AR1242

Time Analyzed :1437

		RT W	MODIN	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=======================================	=====	=====	=====	=======	=======	=====
Aroclor-1242-1	8.78	8.68	8.88	249.7	250.0	-0.1
Aroclor-1242-2	9.48	9.38	9.58	252.4	250.0	1.0
Aroclor-1242-3	10.90	10.80	11.00	250.8	250.0	0.3
Aroclor-1242-4	11.35	11.25	11.45	253.4	250.0	1.4
						,

AROCLOR AVG: 251.6 CAL %D = 0.6

FORM VII PCB

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB5 ID: 0.53 (mm)

Instrument ID: ECD7

Init. Calib. Date: 08/03/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

			1		IS1		IS2	I
			ĺ		AREA	RT	AREA	RT
			=====	======	========		========	======
			ICAL	MIDPT	6328212	3.263	5068453	15.102
			UPPER	LIMIT	12656424	3.363	10136906	15.202
			LOWER	LIMIT	3164106	3.163	2534226	15.002
					Íi			
	CLIENT	LAB	DATE		IS1		IS2	]
	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
i	=======================================	=========		=====	======================================	======		
01	ZZZZZ	ZZZZZ	08/03/15	1716	6222621	3.258	5047030	15.102
02		0.25PPMAR166	08/03/15	1737	6328212	3.263	5068453	15.102
03		0.02PPMAR166	08/03/15	1758	6326177	3.262	5154907	15.102
04		0.05PPMAR166	08/03/15	1820	6210580	3.264	5033371	15.102
05		1PPMAR1660	08/03/15	1841	6160991	3.266	4985647	15.103
06		0.1PPMAR1660	08/03/15	1902	6344317	3.268	5407220	15.103
07		0.5PPMAR1660		1924	6159955	3.267	5303929	15.103
08		AR1242	08/03/15	1945	6219986	3.265	5066767	15.103
09		AR1248	08/03/15	2007	6249050	3.265	5356854	15.103
10		AR1254	08/03/15	2028	6326911	3.267	5032449	15.103
11		AR2162	08/03/15	2049	6246099	3.266	4938617	15.103
12		AR3268	08/03/15	2111	6259531	3.265	5003661	15.103
13	ZZZZZ	ZZZZZ	08/03/15	2132	6338133	3.267	5037306	15.103
14	ZZZZZ	ZZZZZ	08/03/15	2153	6038309	3.262	5048403	15.103
15	ZZZZZ	ZZZZZ	08/03/15	2214	6208035	3.265	5032536	15.103
16	ZZZZZ	ZZZZZ	08/03/15	2236	6278544	3.265	5100405	15.103
17	ZZZZZ	ZZZZZ	08/03/15	2257	6251565	3.264	5061467	15.103
	ZZZZZ	ZZZZZ	08/03/15	2318	6317415	3.264	5061451	15.102
19		AR1248	09/22/15	1104	6712755	3.281	4470958	15.096
20		AR1660	09/22/15	1125	6566937	3.279	4349495	15.096
21	AMV1MBS1	AMV1MBS1	09/22/15	1146	9947714	3.281	6557995	15.096
22	266-B11-2+06	AMV1A	09/22/15	1208	9830559	3.279	6419183	15.096
23	266-S14-2+07	AMV1B	09/22/15	1229	10170491	3.280	7008565	15.096
24	266-W13-2+07	AMV1C	09/22/15	1250	10591985	3.279	7139740	15.096
25	266-N12-2+07	AMV1D	09/22/15	1312	10081532	3.279	6722820	15.096
26	266-E15-2+07	AMV1E	09/22/15	1333	10236778	3.279	7029346	15.095
27	AMV1LCSS1	AMV1LCSS1	09/22/15	1354	10241025	3.277	7036048	15.095
28		AR1660	09/22/15	1415	6859112	3.279	4884863	15.096
29	1	AR1242	09/22/15	1437	8355149	3.279	5855914	15.096

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

Indicates value outside QC Limits

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN

ARI Job No.: AMV1

Project: JFOS3

GC Column: ZB35 ID: 0.53 (mm)

Instrument ID: ECD7

Init. Calib. Date: 08/03/15

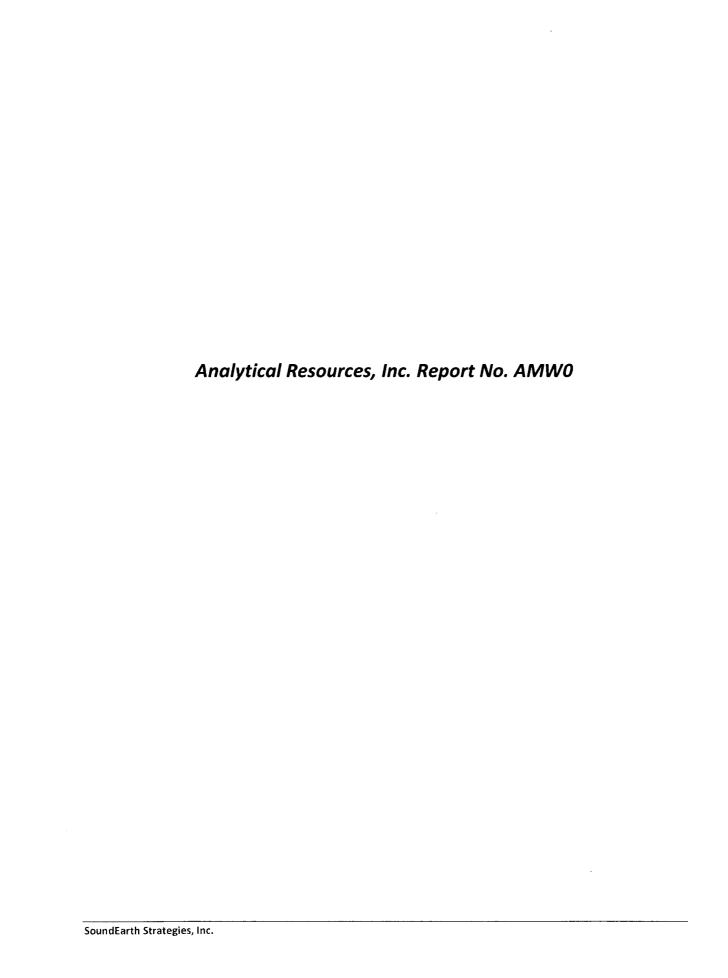
THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

					IS1		IS2	[
			Ì		ARBA	RT	AREA	RT
			======		E=======	======	========	======
			ICAL	MIDPT	12901249	4.365	7598346	15.906
			UPPER	LIMIT	25802498	4.465	15196692	16.006
			LOWER	LIMIT	6450624	4.265	3799173	15.806
								ll
	CLIENT	LAB	DATE		IS1		IS2	
	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	RT
1			========	=====	=======	======	=======	======
01	ZZZZZ	ZZZZZ	08/03/15	1716	12615423	4.360	7577981	15.906
02		0.25PPMAR166	08/03/15	1737	12901249	4.365	7598346	15.906
03		0.02PPMAR166	08/03/15	1758	12889538	4.366	7674080	15.906
04		0.05P <b>PMA</b> R166	08/03/15	1820	12701605	4.367	7596138	15.906
05		1PPMAR1660	08/03/15	1841	12722963	4.369	7648810	15.907
06		0.1PPMAR1660	08/03/15	1902	13013744	4.371	7786984	15.907
07		0.5PPMAR1660	08/03/15	1924	12706249	4.370	7776969	15.907
08		AR1242	08/03/15	1945	12825517	4.369	7804063	15.906
09		AR1248	08/03/15	2007	12932061	4.369	7871936	15.906
10		AR1254	08/03/15	2028	13098041	4.370	7793570	15.907
11		AR2162	08/03/15	2049	12808024	4.369	7735916	15.907
12		AR3268	08/03/15	2111	12831845	4.369	7828166	15.907
13	ZZZZZ	ZZZZZ	08/03/15	2132	13048327	4.369	7840797	15.907
14	ZZZZZ	ZZZZZ	08/03/15	2153	12451023	4.366	7728754	15.907
15	ZZZZZ	ZZZZZ	08/03/15	2214	12732082	4.367	7695088	15.907
16	ZZZZZ	ZZZZZ	08/03/15	2236	12892489	4.368	7804248	15.906
17	ZZZZZ	ZZZZZ	08/03/15	2257	12666986	4.367	7848857	15.907
18	ZZZZZ	ZZZZZ	08/03/15	2318	12781896	4.367	7841933	15.907
19		AR1248	09/22/15	1104	11679311	4.392	5350597	15.906
20		AR1660	09/22/15	1125	11412547	4.389	5110977	15.907
21	AMV1MBS1	AMV1MBS1	09/22/15	1146	16648946	4.392	7531995	15.906
22	266-B11-2+06	AMV1A	09/22/15	1208	15964806	4.391	7689824	15.906
23	266-S14-2+07	AMV1B	09/22/15	1229	16611936	4.391	7915200	15,907
24	266-W13-2+07	AMV1C	09/22/15	1250	17195748	4.390	8364069	15.907
25	266-N12-2+07	AMV1D	09/22/15	1312	16002375	4.390	8038620	15.906
26	266-E15-2+07	AMV1E	09/22/15	1333	16778478	4.389	8270403	15.906
27	AMV1LCSS1	AMV1LCSS1	09/22/15	1354	16998302	4.389	8081416	15.907
28		AR1660	09/22/15	1415	11818995	4.390	5688925	15.907
29		AR1242	09/22/15	1437	14410650	4.390	6806718	15.907
		l		l				

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

Indicates value outside QC Limits





5 October 2015

Dee Gardner Sound Earth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

**RE: JFOS3** 

ARI Job No.: AMW0

Dear Dee:

Please find enclosed the original chain of custody record and the final results for the samples from the project referenced above. Analytical Resources, Inc. received two soil samples on September 21, 2015. The samples were analyzed for PCBs as requested.

These analyses proceeded without incident of note.

If you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris Project Manager 206/695-6210 markh@arilabs.com

cc: Miles Dyer, Jorgensen Forge file AMW0

**Enclosures** 

Chain of Custody Record & Laboratory Analysis Request ARI Assigned Number: Analytical Resources, Incorporated Page: of Turn-around Requested: NORMAL/STANDARD **Analytical Chemists and Consultants** 4611 South 134th Place, Suite 100 ARI Client Company: JORGENSEN FORGE CORP. Date: 9/21/15 ice Present? Tukwila, WA 98168 206.762,1100 206-695-6200 206-695-6201 (fax) Client Contact: MILES DYER No. of Cooler www.arilabs.com Coolers: Temps: Client Project Name: JF053 Analysis Requested Notes/Comments STAGE 2B 64 08, Client Project #: Samplers: -J. LOEFFLER REPORTING PER ŏ PCB. SAP/QAPP Time Matrix Sample ID Date No. Containers 9/21/15/14/18 X SOIL JF053-PC09+15 9/21/15/1420 JF053-PC10+15 X SOIL Relinguished by Received by: Relinquished by: Received by: Comments/Special Instructions CC: DEE GARDNER AND (Signature) (Signature) Printed Name: Printed Name JONATHAN LOEFFLER JONATHAN LOEFFRER AT SOUNDEARTH Company: Company:

Limits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or cosigned agreement between ARI and the Client.

Date & Time:

1549

Date & Time:

dgardner@soundearthine.com

loeffler@soundearthinc.com

SOUNDEARTH

Date & Time: 9/21/15@1549

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless after retention schedules have been established by work-order or contract.



# **Cooler Receipt Form**

ARI Client: JUYGENSEN FOYCE	Project Name: 1705	5	<del></del>
COC No(s):	Delivered by: Fed-Ex UPS Couri	er Hand Delivered Other	:
Assigned ARI Job No: AW N. N. D.	Tracking No:		_ (NA)
Preliminary Examination Phase:	<del> </del>		
Were intact, properly signed and dated custody seals attached to	the outside of to cooler?	YES	(NO)
Were custody papers included with the cooler?		YES	NO
Were custody papers properly filled out (ink, signed, etc.)	********	YES	NO
Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemical control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control control con	nistry) 50		
If cooler temperature is out of compliance fill out form 00070F	210.11	Temp Gun ID#: DOO	2 <u>50</u> 5
Cooler Accepted by:	_Date:	K49	
والمراجع والمتحول والمراجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع والمناجع وال	nd attach all shipping documents		<del></del> _
Log-In Phase:			
Was a temperature blank included in the cooler?		YES	NO
What kind of packing material was used? Bubble Wrap	Wet loe Gel Packs Baggies Foam E	lock Paper Other:	
Was sufficient ice used (if appropriate)?		NA (YES)	NO
Were all bottles sealed in individual plastic bags?		(YES)	NO
Did all bottles arrive in good condition (unbroken)?		(YES	NO
Were all bottle labels complete and legible?		(YES)	NO
Did the number of containers listed on COC match with the number	er of containers received?	(YES)	NO
Did all bottle labels and tags agree with custody papers?		χES)	NO
Were all bottles used correct for the requested analyses?	***************************************	YES	NO
Do any of the analyses (bottles) require preservation? (attach pre-	servation sheet, excluding VOCs)	NA YES	(NO)
Were all VOC vials free of air bubbles?	,,	(NA) YES	NO
Was sufficient amount of sample sent in each bottle?		(YES)	NO
Date VOC Trip Blank was made at ARI	·	(NA)	
Was Sample Split by ARI : (NA) YES Date/Time:	Equipment:	Split by:_	<del></del>
Samples Logged by: Date:	9/2/Time:	1100	
	of discrepancies or concerns **		
	•	· · · · · · · · · · · · · · · · · · ·	
Sample ID on Bottle Sample ID on COC	Sample ID on Bottle	Sample ID on C	oc
Additional Notes, Discrepancies, & Resolutions:			
			1
D. Date			
By: Date:	Small → "sm" (<2 mm)		
Small Air Bubbles Pesthubbles LARGE Air Bubbles - 2mm 2-4 mm > 4 mm	Peabubbles > "pb" (2 to < 4 mm)		
	Large -> "lg" (4 to < 6 mm)		
	Headspace → "hs" (>6 mm)		
	Tre-shore a no ( a pini)		

E0000:00MA

# Sample ID Cross Reference Report

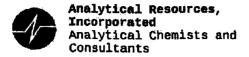


ARI Job No: AMW0 Client: Jorgensen Forge Project Event: N/A Project Name: JFOS3

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	JFOS3-PC09+15	AMW0A	15-16893	Soil	09/21/15 14:18	09/21/15 15:49
2.	JFOS3~PC10+15	AMW0B	15-16894	Soil	09/21/15 14:20	09/21/15 15:49

Printed 09/21/15 Page 1 of 1

AMW0:00004



# Data Reporting Qualifiers Effective 12/31/13

# inorganic Data

- U Indicates that the target analyte was not detected at the reported concentration
- * Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but ≥ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

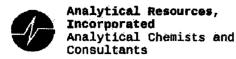
# **Organic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Laboratory Quality Assurance Plan

Page 1 of 3

Version 14-003 12/31/13



- Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
- S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration.

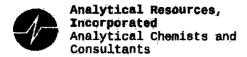
  The reporting limit is raised due to chromatographic interference.

  The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (Dioxin/Furan analysis only)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated diphenyl ethers. (Dioxin/Furan analysis only)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (Dioxin/Furan analysis only)

Laboratory Quality Assurance Plan

Page 2 of 3

Version 14-003 12/31/13



# Geotechnical Data

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sleving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- Weight of sample in some pipette aliquots was below the level required for accurate weighting



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AMW0A LIMS ID: 15-16893

Matrix: Soil

Data Release Authorized:

Reported: 10/02/15

Date Extracted: 09/24/15 Date Analyzed: 10/01/15 06:07 Instrument/Analyst: ECD7/JGR

37324-23-5 Aroclor 1262

11100-14-4 Aroclor 1268

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: JFOS3-PC09+15

SAMPLE

< 17 U

< 17 U

QC Report No: AMW0-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/21/15 Date Received: 09/21/15

Sample Amount: 5.74 g-dry-wt

Final Extract Volume: 5.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 4.9%

17

17

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	17	< 17 U
53469-21-9	Aroclor 1242	17	< 17 บ
12672-29-6	Aroclor 1248	17	< 17 U
11097-69-1	Aroclor 1254	17	< 17 U
11096-82-5	Aroclor 1260	17	< 17 U
11104-28-2	Aroclor 1221	17	< 17 U
11141-16-5	Aroclor 1232	17	< 17 U

Reported in µg/kg (ppb)

## PCB Surrogate Recovery

Decachlorobiphenyl	78.0%
Tetrachlorometaxylene	88.2%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: AMWOB LIMS ID: 15-16894

Matrix: Soil

Data Release Authorized:

Reported: 10/02/15

Date Extracted: 09/24/15 Date Analyzed: 10/01/15 06:28 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: JFOS3-PC10+15

SAMPLE

QC Report No: AMWO-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/21/15 Date Received: 09/21/15

Sample Amount: 5.75 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: 4.8%

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	17	< 17 U
53469-21-9	Aroclor 1242	17	< 17 U
12672-29-6	Aroclor 1248	17	< 17 U
11097-69-1	Aroclor 1254	17	< 17 U
11096-82-5	Aroclor 1260	17	< 17 U
11104-28-2	Aroclor 1221	17	< 17 U
11141-16-5	Aroclor 1232	17	< 17 U
37324-23-5	Aroclor 1262	17	< 17 U
11100-14-4	Aroclor 1268	17	< 17 U

Reported in µg/kg (ppb)

# PCB Surrogate Recovery

	_
Decachlorobiphenyl	75.2%
Tetrachlorometaxylene	81.5%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: MB-092415

LIMS ID: 15-16893

Matrix: Soil

Data Release Authorized:

Reported: 10/02/15

Date Extracted: 09/24/15
Date Analyzed: 10/01/15 05:24
Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: MB-092415

METHOD BLANK

QC Report No: AMW0-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g Final Extract Volume: 5.00 mL Dilution Factor: 1.00

Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	' < 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U
37324-23-5	Aroclor 1262	20	< 20 U
11100-14-4	Aroclor 1268	20	< 20 U

Reported in µg/kg (ppb)

#### PCB Surrogate Recovery

Decachlorobiphenyl	80.0%
Tetrachlorometaxylene	88.8%

AMW0:00010



# ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A

Page 1 of 1

Lab Sample ID: LCS-092415 LIMS ID: 15-16893

Matrix: Soil

Data Release Authorized:

Reported: 10/02/15

Date Extracted: 09/24/15 Date Analyzed: 10/01/15 05:46

Instrument/Analyst: ECD7/JGR GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No

Sample ID: LCS-092415 LAB CONTROL

QC Report No: AMW0-Jorgensen Forge Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g-dry-wt

Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	443	500	88.6%
Aroclor 1260	452	500	90.4%

#### PCB Surrogate Recovery 79.8% Decachlorobiphenyl Tetrachlorometaxylene 88.8%

Results reported in µg/kg (ppb)

FORM III

AMWØ: 00011



# SW8082/PCB SOIL/SOLID/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: AMW0-Jorgensen Forge Project: JFOS3

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-092415	80.0%	59-115	88 88	58-112	0
LCS-092415	79.8%	59-115		58-112	ŏ
JF0S3-PC09+15	78.0%	47-120	88.2%	53-116	0
JF0S3-PC10+15	75.2%	47-120	81.5%	53-116	0

Microwave (MARS) Control Limits PCBSMI Prep Method: SW3546 Log Number Range: 15-16893 to 15-16894

FORM-II SWB082

Page 1 for AMW0 AMW0: 00012

# PCB METHOD BLANK SUMMARY

BLANK NO.

AMWOMBS1

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

Lab Sample ID: AMWOMBS1

Lab File ID: 09301542

Date Extracted: 09/24/15

Matrix: SOLID

Date Analyzed: 10/01/15

Instrument ID: ECD7

Time Analyzed: 0524

GC Columns: ZB5/ZB35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
	**=====================================	=========	========
01	AMW0LCSS1	AMW0LCSS1	10/01/15
02	JFOS3-PC09+15	AMWOA	10/01/15
03	JFOS3-PC10+15	AMW0B	10/01/15

ALL RUNS ARE DUAL COLUMN

# 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

Calibration Date: 09/30/15

#### SURROGATES

RT WIN   LVI	1   LVL2	LVL3	LVL4	LVL5	IVL6	MEAN	%RSD
TCX 6.18- 6.38 0.486							

Arocl	or-1016	LVL1		LVL2	1	LVL3	- 1	LVL4	-	LVL5		LVL6		MBAN	1	&RSD
Peak	RT WIN	.02	l	0.05	1		-									
1	8.18- 8.38	0.0141	 I	0.0130										0.0127		
	8.67- 8.87		•		•		-									
3	8.97- 9.17	0.0130	Ţ	0.0141	- 1	0.0142	- 1	0.0137	ļ	0.0137	1	0.0132	-	0.0137	- {	3.5
4	9.75- 9.95	0.0153	- 1	0.0157	- 1	0.0156	- 1	0.0148	- 1	0.0148	- 1	0.0141	-1	0.0150	- [	4.0

AROCLOR AVERAGE %RSD = 4.6

Aroclor-1260	LVL1	1	LVL2	-	LVL3	1	LVL4	-	LVL5	H	LVL6	-	MEAN		*RSD
Peak RT WIN	.02	١	0.05		0.1	1	.25	-	0.5	١	1.0				R^2
1 12.30-12.50	0.0648	 	0.0613	 	0.0605		0.0598		0.0586		0.0568	 	0.0603		4.5
2 12.98-13.18	•	İ	0.1619	•	0.1670	•	0.1740						0.1711		4.9
3 13.35-13.55	0.0657		0.0653	1	0.0664	- 1	0.0676	- 1	0.0680	-	0.0672	1	0.0667	1	1.6
4 13.45-13.65	0.0448	1	0.0428	1	0.0430	1	0.0435	- 1	0.0435	1	0.0425		0.0433		1.9
5 13.86-14.06	0.0220	1	0.0219	- 1	0.0211	1	0.0209	ì	0.0206	1	0.0201	1	0.0211	١	3.4

AROCLOR AVERAGE %RSD = 3.3

FORM VI PCB-1

AMW0:00014

# 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMW0 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 09/30/15

#### SURROGATES

1	RT WIN					LVL5				•
,	TCX 6.56- 6.76		·			·			·	į
1	DCB 15.22-15.42	1.6558	1.4818	1.3817	1.2372	1.2518	1.1910	1.3666	13.0	
Ų.								<b></b>		ı

roclor-1016	LVL1		LVL2		LAT3	- 1	LVL4		LVL5	-	LVL6	-	MEAN	1	<b>₹RSD</b>
eak RT WIN	. 02	1	0.05	•		•		•	0.5			•		•	R^2
1 8.68- 8.88	0.0518	1	0.0466												
2 9.39- 9.59	0.1013		0.0928	-	0.0905	-	0.0825	ļ	0.0802	-	0.0746	+	0.0870	1	11.1
3 9.80-10.00	0.0256		0.0250	ł	0.0244	1	0.0222	-[	0.0212	1	0.0197	ı	0.0230	1	10.1
4 10.35-10.55	0.0344	1	0.0324	-1	0.0312	-1	0.0284	]	0.0272	1	0.0253	-	0.0298	1	11.4

AROCLOR AVERAGE %RSD = 12.1

Aroclor-12	60	LVL1	- 1	LVL2	- [	LVL3	- 1	LVL4	- }	LVL5	- }	rare	MEAN	-	%R8D
Peak Ri	MIN	.02	1	0.05	1	0.1	ı	.25	İ	0.5	1	1.0	1		R^2
1 12.81-	13.01	0.1411	1	0.1230		0.1167		0.1066	1	0.1028		0.0954	0.1143		14.4
2 13.56-	13.76	0.2283	1	0.2154	1	0.2101	1	0.1972	1	0.1977	1	0.1866	0.2059	1	7.3
3 13.99-	14.19	0.0791	- [	0.0694	1	0.0650		0.0580	1	0.0571	-	0.0530	0.0636		15.1
4 14.04-	14.24	0.1561	1	0.1407	1	0.1372	1	0.1237	1	0.1243	-	0.1158	0.1330	-	11.0

AROCLOR AVERAGE %RSD = 11.9

FORM VI PCB-1

AMW0:00015

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMW0

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

1	Aroclo	r-1221	]
Deak	RT	RT WIN	Cal Factor
		XI WIN	
1	4.961	4.86- 5.06	0.00283
2 3	6.935 7.060		0.00465 0.01406
	 Aroclo	r-1232	 
}	222 0020	1 1252	Cal
Peak	RT	RT WIN	Factor
1	4.960	4.86- 5.06	0.00157
2	7.057	6.96- 7.16	0.00920
3 4	8.765 9.661	8.66- 8.86 9.56- 9.76	0.01630 0.00525
	9.001	7.30- 7.70	
		. 1010	
1	Aroclo	r-1242	Cal
Peak	RT	RT WIN	Factor
1	 8.768	8.67- 8.87	1 0.03058
2	9.065	8.97- 9.17	0.01086
	10.299	10.20-10.40	0.01433
4	10.545	10.45-10.65	0.01603
	Aroclo	r-1248	Cal
Peak	RT	RT WIN	Factor
			<u>'</u>
1	9.403	9.30- 9.50	0.00814 0.01928
2 3	9.847 10.297	9.75- 9.95 10.20-10.40	0.01928
_	10.542	10.44-10.64	0.02321

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMW0 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

1	Aroclo	r-1254	Cal
Peak	RT	RT WIN	Factor
1 10	).306	10.21-10.41	0.01495
2 1	0.626	10.53-10.73	0.02250
3 13	1.007	10.91-11.11	0.01784
4 1:	L.145	11.04-11.24	0.03371
5 13	L.859	11.76-11.96	0.02434
1	Aroclo	r-1262	
_			Cal
Peak	RT	RT WIN	Factor
1 12	2.404	12.30-12.50	0.07896
	3.079	12.98-13.18	0.18539
	3.454	-	0.04855
	3.618		0.07904
5 14	1.164	14.06-14.26	0.06398
			<u>.</u>
1	Aroclo	r-1268	
			Cal
Peak	RT	RT WIN	Factor
1 1:	 3.555	13.45-13.65	0.23016
2 1	3.617	13.52-13.72	0.21624
3 13	3.942	13.84-14.04	0.19228
4 1	4.547	14.45-14.65	0.54029

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMW0

Project: JFOS3

GC Column: ZB35

Instrument ID: ECD7

	Aroclo		 
Peak	RT	RT WIN	Cal Factor
1 2 3 4	5.768 7.493 7.795 7.935	5.67- 5.87 7.39- 7.59 7.69- 7.89 7.84- 8.04	0.00782 0.01292 0.00749 0.02264
	Aroclo	r-1232	
Peak	RT	RT WIN	Cal Factor
1 2 3 4	5.767 7.934 8.779 9.903	5.67- 5.87 7.83- 8.03 8.68- 8.88 9.80-10.00	0.00476 0.01608 0.01883 0.00983
	Aroclo	r-1242	 
Peak	RT	RT WIN	Cal Factor
2 3 :	8.779 9.485 10.904 11.346	8.68- 8.88 9.38- 9.58 10.80-11.00 11.25-11.45	0.03153 0.06518 0.02886 0.02919
<b></b>	Aroclo	r-1248	
Peak	RT	RT WIN	Cal Factor
2 3	9.475 10.444 10.982 11.343		0.03895 0.03290 0.03431 0.04457

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMW0 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

	Aroclo	r-1254	g-1
D = = 1-	ъm	DOI 14737	Cal
Peak	RT	RT WIN	Factor
1 1	1.216	11.12-11.32	0.03999
2 1	1.313	11.21-11.41	0.01897
3 1	1.753	11.65-11.85	0.03150
	1.904	11.80-12.00	0.06224
		12.58-12.78	0.04037
	Aroclo	r-1262	
			_Cal
Peak	RT	RT WIN	Factor
1 1	2.909	12.81-13.01	0.05308
	3.431	13.33-13.53	0.10909
	3.658		0.21531
	4.145		0.13699
	4.687		0.06737
<b></b>	Aroclo		
	ALOCIO	1 1200	Cal
Peak	RT	RT WIN	Factor
1 1	4.092	13.99-14.19	0.22060
2 1	4.145	14.05-14.25	0.20647
3 1	4.454	14.35-14.55	0.16601
4 1	5.033	14.93-15.13	0.44811

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1248 Time Analyzed: 0359

		TO	AMOUNT (ng)	AMOUNT (ng)	%D
===	=====	======	=======	=======	=====
.40	9.30	9.50	251.0	250.0	0.4
.85	9.75	9.95	250.1	250.0	0.0
.30	10.20	10.40	250.7	250.0	0.3
.54	10.44	10.64	250.9	250.0	0.3
	.85 .30	.85 9.75 .30 10.20	.85 9.75 9.95 .30 10.20 10.40	.40 9.30 9.50 251.0 .85 9.75 9.95 250.1 .30 10.20 10.40 250.7	.40 9.30 9.50 251.0 250.0 .85 9.75 9.95 250.1 250.0 .30 10.20 10.40 250.7 250.0

AROCLOR AVG: 250.7 CAL %D = 0.3

FORM VII PCB

AMWØ: ØØØ2Ø

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1660

Time Analyzed: 0421

		RT WINDOW			NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
	1	ł		(ng)	(ng)	
	== ======	=====	=====	=======	=======	=====
Aroclor-1016-1	8.28	8.18	8.38	241.0	250.0	-3.6
Aroclor-1016-2	8.76	8.67	8.87	241.2	250.0	-3.5
Aroclor-1016-3	9.06	8.97	9.17	247.0	250.0	-1.2
Aroclor-1016-4	9.85	9.75	9.95	242.8	250.0	-2.9

AROCLOR AVG: 243.0 CAL %D = -2.8

Date Analyzed: 10/01/15

Lab Standard ID: AR1660 Time Analyzed: 0421

		RT WINDOW		CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
	ļ			(ng)	(ng)	
	=====	=====	=====	=======		=====
Aroclor-1260-1	12.40	12.30	12.50	233.1	250.0	-6.8
Aroclor-1260-2	13.08	12.98	13.18	240.2	250.0	-3.9
Aroclor-1260-3	13.45	13.35	13.55	238.0	250.0	-4.8
Aroclor-1260-4	13.55	13.45	13.65	234.6	250.0	-6.1
Aroclor-1260-5	13.96	13.86	14.06	231.9	250.0	-7.2
	•			•		-

AROCLOR AVG: 235.6 CAL %D = -5.8

FORM VII PCB

AMW0:00021

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed :10/01/15

Lab Standard ID: AR1242 Time Analyzed: 0940

COMPOUND/PEAK NO.	RT	RT WI FROM	TO TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D
		======	======	=======	======	=====
Aroclor-1242-1	8.77	8.67	8.87	250.1	250.0	0.0
Aroclor-1242-2	9.07	8.97	9.17	249.7	250.0	-0.1
Aroclor-1242-3	10.30	10.20	10.40	249.0	250.0	-0.4
Aroclor-1242-4	10.55	10.45	10.65	249.9	250.0	-0.0
	'	1	•	•	'	·

AROCLOR AVG: 249.7 CAL %D = -0.1

FORM VII PCB

AMWØ: 00022

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1660

Time Analyzed: 1001

	RT W	MODM	CALC	NOM		
RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D	
:   =====	3=====	=====	======	=======	=====	
8.28	8.18	8.38	241.7	250.0	-3.3	
8.77	8.67	8.87	241.7	250.0	-3.3	
9.07	8.97	9.17	247.1	250.0	-1.2	
9.85	9.75	9.95	242.5	250.0	-3.0	
	8.28 8.77 9.07	RT FROM  8.28 8.18 8.77 8.67 9.07 8.97	8.28 8.18 8.38 8.77 8.67 8.87 9.07 8.97 9.17	RT FROM TO AMOUNT (ng)  8.28 8.18 8.38 241.7 8.77 8.67 8.87 241.7 9.07 8.97 9.17 247.1	RT FROM TO AMOUNT (ng) (ng) ====================================	

AROCLOR AVG: 243.3 CAL D = -2.7

Date Analyzed: 10/01/15

Lab Standard ID: AR1660 Time Analyzed: 1001

NDOW	CALC	NOM		
TO	AMOUNT (ng)	AMOUNT (ng)	<b>%</b> D	
	=======	======	====	
12.50	243.9	250.0	-2.4	
13.18	249.2	250.0	-0.3	
13.55	248.0	250.0	-0.8	
13.65	243.2	250.0	-2.7	
14.06	238.4	250.0	-4.6	
		- J		

AROCLOR AVG: 244.6 CAL D = -2.2

FORM VII PCB

AMW0:00023

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMW0

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1248

Time Analyzed: 0359

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	₽D
				(ng)	(ng)	
=======================================	======	=====	=====	=======	=======	====
Aroclor-1248-1	9.47	9.37	9.57	251.5	250.0	0.6
Aroclor-1248-2	10.44	10.34	10.54	249.7	250.0	-0.1
Aroclor-1248-3	10.98	10.88	11.08	250.4	250.0	0.1
Aroclor-1248-4	11.34	11.24	11.44	249.5	250.0	-0.2
	•	•		•	•	•

AROCLOR AVG: 250.3 CAL %D = 0.1

FORM VII PCB

AMWØ: 00024

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1660

Time Analyzed: 0421

		RT W	NDOW	CALC	NOM		
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D	
	==   =====	=====	=====	=======	=======		
Aroclor-1016-1	8.78	8.68	8.88	232.4	250.0	-7.0	
Aroclor-1016-2	9.48	9.39	9.59	234.6	250.0	-6.2	
Aroclor-1016-3	9.90	9.80	10.00	238.6	250.0	-4.6	
Aroclor-1016-4	10.44	10.35	10.55	233.9	250.0	-6.4	

AROCLOR AVG: 234.9 CAL D = -6.0

Date Analyzed :10/01/15

Lab Standard ID: AR1660 Time Analyzed: 0421

		RT W	NDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
gn====================================	=====	=====	22222	=======	# = = = = <b>= =</b>	=====
Aroclor-1260-1	12.91	12.81	13.01	219.0	250.0	-12.4
Aroclor-1260-2	13.66	13.56	13.76	232.5	250.0	-7.0
Aroclor-1260-3	14.09	13.99	14.19	227.0	250.0	-9.2
Aroclor-1260-4	14.14	14.04	14.24	233.5	250.0	-6.6
······································		•	•	•		

AROCLOR AVG: 228.0 CAL %D = -8.8

FORM VII PCB

AMWØ: 00025

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed :10/01/15

Lab Standard ID: AR1242 Time Analyzed: 0940

RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	%D	
=====	=====		=======	======	====	
8.78	8.68	8.88	250.0	250.0	-0.0	
9.48	9.38	9.58	249.8	250.0	-0.1	
10.90	10.80	11.00	242.4	250.0	-3.0	
11.35	11.25	11.45	242.8	250.0	-2.9	
	8.78 9.48 10.90	RT FROM  ====== 8.78 8.68 9.48 9.38 10.90 10.80	RT FROM TO  ====== ==== =======================	RT FROM TO AMOUNT (ng) ====== 8.78 8.68 8.88 250.0 9.48 9.38 9.58 249.8 10.90 10.80 11.00 242.4	RT FROM TO AMOUNT (ng) (ng)  ====== 8.78 8.68 8.88 250.0 250.0  9.48 9.38 9.58 249.8 250.0  10.90 10.80 11.00 242.4 250.0	

AROCLOR AVG: 246.2 CAL %D = -1.5

FORM VII PCB

AMWØ: 00026

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1660 Time Analyzed: 1001

		RT W	MOOM	CALC	NOM		
COMPOUND/PEAK NO.	RT	FROM TO		AMOUNT (ng)	AMOUNT (ng)	₩D	
	=====	22222	=====	=======	=======	=====	
Aroclor-1016-1	8.78	8.68	. 8.88	233.4	250.0	-6.6	
Aroclor-1016-2	9.49	9.39	9.59	235.9	250.0	-5.6	
Aroclor-1016-3	9.90	9.80	10.00	239.3	250.0	-4.3	
Aroclor-1016-4	10.45	10.35	10.55	226.6	250.0	-9.4	
11100201 1020 1	1 20,30	1 20.00	, 20.55	220.0	250.0		

AROCLOR AVG: 233.8 CAL D = -6.5

Date Analyzed :10/01/15

Lab Standard ID: AR1660 Time Analyzed: 1001

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
######################################	======	=====	======	=======	=======	=====
Aroclor-1260-1	12.91	12.81	13.01	235.2	250.0	-5.9
Aroclor-1260-2	13.66	13.56	13.76	244.1	250.0	-2.4
Aroclor-1260-3	14.09	13.99	14.19	236.7	250.0	~5.3
Aroclor-1260-4	14.14	14.04	14.24	242.4	250.0	-3.0
	-	•	•	,	•	

AROCLOR AVG: 239.6 CAL %D = -4.2

FORM VII PCB

AMW0:00027

## FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: AMWO

Project: JFOS3

GC Column: ZB5 ID: 0.53 (mm)

Instrument ID: BCD7

Init. Calib. Date: 09/30/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

			1	· · · · · · · · · · · · · · · · · · ·	IS1		IS2	
			ļ		AREA	RT	AREA	RT
			ļ.	======	=======	======	#=======	=====
				MIDPT	8066556	3.285	5454994	'
			UPPER		16133112	3.385	10909988	!
			LOWER	LIMIT	4033278	3.185	2727497	14.995
			<u> </u>					
	CLIENT	LAB	DATE		IS1		IS2	
	SAMPLE NO.	SAMPLE ID	ANALYZED	TIME	AREA	RT	AREA	ŔŦ
İ				=====	=======	======	========	======
	ZZZZZ	ZZZZZ	09/30/15	1639	8156160	3.285	5568951	15.096
02		0.25PPMAR166	09/30/15	1700	8066556	3.285	5454994	15.095
03		0.02PPMAR166	09/30/15	1721	8091336	3.284	5600526	15.095
04		0.05PPMAR166	09/30/15	1742	7913459	3.284	5577369	15.095
05		1PPMAR1660	09/30/15	1804	7875770	3.284	5564302	15.095
06		0.1PPMAR1660	09/30/15	1825	8219827	3.283	5857219	15.095 <b> </b>
07		0.5PPMAR1660	09/30/15	1846	8005014	3.282	5619457	15.095
08		AR1242	09/30/15	1908	8062646	3.284	5758938	15.095
09		AR1248	09/30/15	1929	8072160	3.285	5743651	15.095
10		AR1254	09/30/15	1950	8169016	3.284	5868403	15.095
11		AR2162	09/30/15	2012	8215009	3.282	5905238	15.094
12		AR3268	09/30/15	2033	8262439	3.282	5888824	15.094
13	ZZZZZ	ZZZZZ	09/30/15	2054	7975276	3.281	5736817	15.094
14	ZZZZZ	ZZZZZ	09/30/15	2115	8130853	3.278	5928831	15.094
15	ZZZZZ	ZZZZZ	09/30/15	2137	7961470	3.279	5833507	15.094
16	ZZZZZ	ZZZZZ	09/30/15	2158	8188078	3.281	5977419	15.094
17	ZZZZZ	ZZZZZ	09/30/15	2219	7988538	3.280	5855523	15.094
18	ZZZZZ	ZZZZZ	09/30/15	2240	8082296	3.280	5892233	15.094
19		AR1248	10/01/15	0359	8285443	3.279	6050695	15.094
20		AR1660	10/01/15	0421	8369053	3.279	6077631	15.094
21	AMWOMBS1	AMWOMBS1	10/01/15	0524	8345373	3.281	6226161	15.094
22	AMW0LCSS1	AMWOLCSS1	10/01/15	0546	8564689	3.279	6272345	15.093
23	JF083-PC09+1	AOWMA	10/01/15	0607	8737335	3.280	6479989	15.094
	JF083-PC10+1	,	10/01/15	0628	8954880	3.282	6611636	15.093
25		AR1242	10/01/15	0940	8185709	3.282	5680381	15.094
26		AR1660	10/01/15	1001	8328096	3.286	5722575	15.094
				İ	İ			

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

AMWØ: ØØØ28

^{*} Indicates value outside QC Limits

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: AMW0 Project: JFOS3

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD7

Init. Calib. Date: 09/30/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

						IS1		IS2	
						AREA	RT	AREA	RT
		•		======		<b>6 2</b>	======	=======	<b>#====</b>
				ICAL	MIDPT	13586362	4.397	6512961	15.906
				UPPER	LIMIT	27172724	4.497	13025922	16.006
				LOWER	LIMIT	6793181	4.297	3256480	15.806
		···					l		
[	CLIENT	LAB	I	ATE		IS1		IS2	
	SAMPLE NO.	SAMPLE ID	ANA	LYZED	TIME	ĀRBA	RT	AREA	RT
1	_=======	========	====	=====	=====	=======		=======	
01	ZZZZZ	ZZZZZ	09/	30/15	1639	13723894	4.396	6632024	15.907
02		0.25PPMAR166		30/15	1700	13586362	4.397	6512961	15.906
03		0.02PPMAR166	09/	30/15	1721	13532075	4.395	6625253	15.907
04		0.05PPMAR166	09/	30/15	1742	13332298	4.396	6594047	15.906
05		1PPMAR1660	09/	30/15	1804	13337715	4.397	6622148	15.906
06		0.1PPMAR1660	09/	30/15	1825	13929861	4.395	6974857	15.907
07		0.5PPMAR1660	09/	30/15	1846	13624637	4.395	6729270	15.907
80		AR1242	09/	30/15	1908	13648234	4.396	6860812	15.906
09	,	AR1248	09/	30/15	1929	13676949	4.397	6835392	15.907
10		AR1254	09/	30/15	1950	13737253	4.395	6972452	15.906
11		AR2162	09/	30/15	2012	13635771	4,395	6981224	15.906
12		AR3268	09/	30/15	2033	13710660	4.394	6956825	15.906
13	ZZZZZ	ZZZZZ	09/	30/15	2054	13350323	4.394	6821654	15.905
14	ZZZZZ	ZZZZZ	09/	30/15	2115	13598897	4,391	6969140	15.906
15	22222	ZZZZZ	09/	30/15	2137	13344503	4.392	6865704	15.906
16	22222	ZZZZZ	09/	30/15	2158	13682152	4.392	7087472	15.905
	ZZZZZ	ZZZZZ	09/	30/15	2219	13312259	4.392	6942012	15.905
	ZZZZZ	ZZZZZ		30/15	2240	13480625	4.393	7000012	15.905
19		AR1248	10/	01/15	0359	13926088	4.390	7290537	15.905
20		AR1660		01/15	0421	14069800	4.391	7343472	15.905
	AMW0MBS1	AMWOMBS1		01/15	0524	13912938	4.393	7368027	15.905
22	AMW0LCSS1	AMWOLCSS1		01/15	0546	14338298	4.390	7607579	15.905
	JFOS3-PC09+1			01/15	0607	14511026	4.392	7805302	15.904
	JFOS3-PC10+1			01/15	0628	14852168	4.394	8001061	15.906
25		AR1242		01/15	0940	13862531	4.395	6280034	15.907
26		AR1660		01/15	1001	14088602	4.398	6332588	15.905
			,, 	,					

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

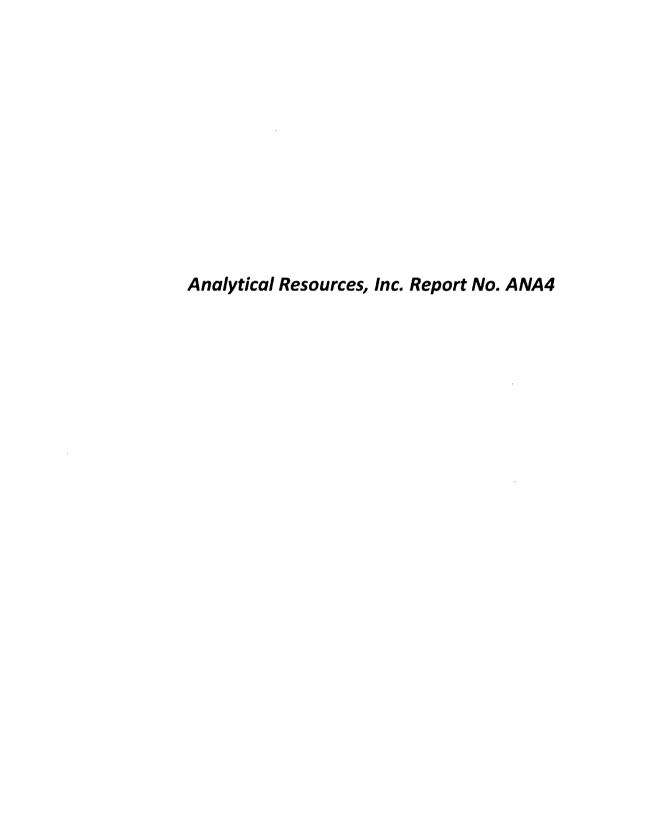
IS2 = Hexabromobiphenyl

FORM VIII PCB

AMW0:00029

page 1 of 1

^{*} Indicates value outside QC Limits



SoundEarth Strategies, Inc.



6 October 2015

Dee Gardner Sound Earth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

RE: JFOS3

ARI Job No.: ANA4

Dear Dee:

Please find enclosed the original chain of custody record and the final results for the sample from the project referenced above. Analytical Resources, Inc. received one soil sample on September 23, 2015. The sample was analyzed for PCBs as requested.

This analysis proceeded without incident of note.

If you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Mark D. Harris
Project Manager
206/695-6210
markh@arilabs.com

cc: Miles Dyer, Jorgensen Forge file ANA4

**Enclosures** 

10f27

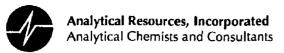
# Chain of Custody Record & Laboratory Analysis Request

ARI Client Company:	Turn-around	Phone:			Page: Date:	9/23/1	of Ice	1		(	Analytical Resources, Incorporated Analytical Chemists and Consultant 4611 South 134th Place, Suite 100 Tukwila, WA 98168			
Client Contact: MILES DYER	<u>.</u>	CORP.	206.+	62.110	No. of Cooler Coolers: Temps:						206-695-6200 206-695-6201 (fax) www.arilabs.com			
Client Project Name: JFOS 3	•	-				_		Analysis f	Requested		<u> </u>		Notes/Comments	
Client Project #:	Samplers:	S. LOEFF	LER		6 67 8082								STAGE 2B REPORTING	
Sample ID	Date	Time	Matrix	No. Containers	PCBs EPA 8								PER SAP/QAPP	
JF053-PC11+15	9/23/15	0837	SOIL	1	×									
					<u> </u>									
					25	1								
					- 10	*	23/15							
										·				
Comments/Special Instructions	Relinquished by: (Signature)	24/		Received by: (Signature)	12			Relinquished (Signature)	l by:			Received by: (Signature)		
CC: DEE GARDNER AND JONATHAN LOEFFLER AT	Printed Name:	اما المماد	EFFLEE	Printed Name:	1) W	LAD	VIN	Printed Nam	e:			Printed Nam	e:	
SOUNDEARTH dawdoorhing.com	Company: Scundearth Company:		Сотрыту:			Corpusny: Cor			Company:	отралу:				
dg.rdner@scundearthinc.com jlooffler@scundearthinc.com	Date & Time: 9/23/	15 @ 10	127	Date & Time:	115	lυ	27	Date & Time				Date & Time:		

Imits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program neets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for aid services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or coligned agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless retention schedules have been established by work-order or contract.





# **Cooler Receipt Form**

ARI Client: JOYG ENS	en Forge	Project Name	JFOS 3	<u> </u>		
COC No(s):	NA NA	Delivered by:	Fed-Ex UPS Cou	rier Hand Deliv	vered Other:	
Assigned ARI Job No:	4	·				NA /
Preliminary Examination Phase:		Trading 713.		1		
Were intact, properly signed and d	ated custody seals attached to	the outside of to co	aler?		YES	(NO)
Were custody papers included with	•				(YES)	NO
Were custody papers properly filler				·	<b>(E)</b>	NO
Temperature of Cooler(s) (°C) (rec			 _}			
If cooler temperature is out of com	pliance fill out form 00070F			Temp Gun ID	# DOO	2005
Cooler Accepted by:	W	Date: 9/23	3/15 Time	. 1027		
Обыст / косорист о ј.	Complete custody forms a			/·		
Log-in Phase:					<del></del>	
_	in the cooler		,		YES	(NO)
Was a temperature blank included What kind of packing material wa		Wet Toe Gel Pack		Block Daner (		0,00
Was sufficient ice used (if appropri				NA	(YES )	NO
Were all bottles sealed in individua				11/1		(NO)
Did all bottles arrive in good condit	=				YES	NO
Were all bottle labels complete and					YES	NO
Did the number of containers listed	<del>-</del>				YES	NO
					~)	NO NO
Did all bottle labels and tags agree					YES	
Were all bottles used correct for the	•			$G_{i}$	YES	NO
Do any of the analyses (bottles) re-					YES	NO
Were all VOC vials free of air bubb				NA	YES	NO
Was sufficient amount of sample s  Date VOC Trip Blank was made at		•		$\left( \begin{array}{c} \\ \\ \\ \end{array} \right)$	YES	NO
Was Sample Split by ARI:	`\		uipment		Split by:	
Yes Sample Spire by Ard	/ TES Date Time	010014	uipinient		Spin by	<del></del>
Samples Logged by:	Date:	1123/1	Time:	1338		
	** Notify Project Manage	r of discrepancies	or concerns **			
Sample ID on Bottle	Sample ID on COC	Sample II	on Bottle	Sam	ple ID on CC	oc
Additional Notes, Discrepancies	, & Resolutions:					
·						
By: Date		Small → "sm" (<	7 mm 1			
Small Air Bubbles Peabubble2mm 2-4 mm	1 01/02/40 5-0	Peabubbles → "pl				
		Large > "lg" (4 to				<del>-</del>
		Headspace -> "hs"	( 2 0 mm )			

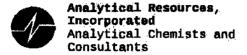
# Sample ID Cross Reference Report



ARI Job No: ANA4
Client: Jorgensen Forge
Project Event: N/A
Project Name: JFOS3

Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1. JFOS3-PC11+15	ANA4A	15-17007	Soil	09/23/15 08:37	09/23/15 10:27

Printed 09/23/15 Page 1 of 1



# Data Reporting Qualifiers Effective 12/31/13

# inorganic Data

- U Indicates that the target analyte was not detected at the reported concentration
- Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but ≥ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

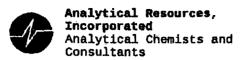
# **Organic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Laboratory Quality Assurance Plan

Page 1 of 3

Version 14-003 12/31/13

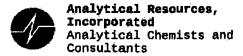


- Q Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
- Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration.
  The reporting limit is raised due to chromatographic interference.
  The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (Dioxin/Furan analysis only)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated diphenyl ethers. (Dioxin/Furan analysis only)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (Dioxin/Furan analysis only)

Laboratory Quality Assurance Plan

Page 2 of 3

Version 14-003 12/31/13



# Geotechnical Data

- A The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- Weight of sample in some pipette aliquots was below the level required for accurate weighting



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: ANA4A LIMS ID: 15-17007

Matrix: Soil

Data Release Authorized: 🖟

Reported: 10/05/15

Date Extracted: 09/26/15
Date Analyzed: 09/30/15 05:57
Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: JFOS3-PC11+15

SAMPLE

QC Report No: ANA4-Jorgensen Forge

Project: JFOS3

Date Sampled: 09/23/15 Date Received: 09/23/15

Sample Amount: 5.80 g-dry-wt

Final Extract Volume: 5.00 mL
Dilution Factor: 1.00
Silica Gel: No

Percent Moisture: 3.8%

CAS Number	Analyte	roð	Result
12674-11-2	Aroclor 1016	17	< 17 U
53469-21-9	Aroclor 1242	17	< 17 U
12672-29-6	Aroclor 1248	17	< 17 U
11097-69-1	Aroclor 1254	17	< 17 U
11096-82-5	Aroclor 1260	17	< 17 U
11104-28-2	Aroclor 1221	17	< 17 U
11141-16-5	Aroclor 1232	17	< 17 U
37324-23-5	Aroclor 1262	17	< 17 U
11100-14-4	Aroclor 1268	17	< 17 U

Reported in µg/kg (ppb)

#### PCB Surrogate Recovery

Decachlorobiphenyl	93.8%
Tetrachlorometaxylene	78.5%



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3546

Page 1 of 1

Lab Sample ID: MB-092615

LIMS ID: 15-17007

Matrix: Soil

Data Release Authorized:

Reported: 10/05/15

Date Extracted: 09/26/15 Date Analyzed: 09/30/15 05:14 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No QC Report No: ANA4-Jorgensen Forge Project: JFOS3

Sample ID: MB-092615

METHOD BLANK

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g Final Extract Volume: 5.00 mL Dilution Factor: 1.00 Silica Gel: No

Percent Moisture: NA

CAS Number	Analyte	roð	Result
12674-11-2	Aroclor 1016	20	< 20 U
53469-21-9	Aroclor 1242	20	< 20 U
12672-29-6	Aroclor 1248	20	< 20 U
11097-69-1	Aroclor 1254	20	< 20 U
11096-82-5	Aroclor 1260	20	< 20 U
11104-28-2	Aroclor 1221	20	< 20 U
11141-16-5	Aroclor 1232	20	< 20 U
37324-23-5	Aroclor 1262	20	< 20 U
11100-14-4	Aroclor 1268	20	< 20 U

Reported in µg/kg (ppb)

### PCB Surrogate Recovery

Decachlorobiphenyl	97.5%
Tetrachlorometaxylene	80.2%

FORM I



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A

Page 1 of 1

Lab Sample ID: LCS-092615

LIMS ID: 15-17007

Matrix: Soil

Data Release Authorized:

Reported: 10/05/15

Date Extracted: 09/26/15 Date Analyzed: 09/30/15 05:35

Instrument/Analyst: ECD7/JGR GPC Cleanup: No Sulfur Cleanup: Yes Acid Cleanup: Yes Florisil Cleanup: No Sample ID: LCS-092615

LAB CONTROL

QC Report No: ANA4-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 5.00 g-dry-wt

Final Extract Volume: 5.00 mL
Dilution Factor: 1.00
Silica Gel: No

D 1 34 7 1 ... 337

Percent Moisture: NA

Analyte	Lab Control	Spike Added	Recovery
Aroclor 1016	432	500	86.4%
Aroclor 1260	485	500	97.0%

### PCB Surrogate Recovery

Decachlorobiphenyl	100%
Tetrachlorometaxylene	80.5%

Results reported in  $\mu g/kg$  (ppb)



# SW8082/PCB SOIL/SOLID/SEDIMENT SURROGATE RECOVERY SUMMARY

Matrix: Soil

QC Report No: ANA4-Jorgensen Forge Project: JFOS3

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-092615		59-115	•••	58-112 58-112	0
LCS-092615 JFOS3-PC11+15	100% 93.8%	59-115 47-120	• • • • •	53-112	0

Microwave (MARS) Control Limits PCBSMI

Prep Method: SW3546

Log Number Range: 15-17007 to 15-17007

# PCB METHOD BLANK SUMMARY

BLANK NO.

ANA4MBS1

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

Lab Sample ID: ANA4MBS1

Lab File ID: 09291555

Date Extracted: 09/26/15

Matrix: SOLID

Date Analyzed: 09/30/15

Instrument ID: ECD7

Time Analyzed: 0514

GC Columns: ZB5/ZB35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
	=======================================	========	========
01	ANA4LCSS1	ANA4LCSS1	09/30/15
02	JFOS3-PC11+15	ANA4A	09/30/15
			, ,

ALL RUNS ARE DUAL COLUMN

# 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

RT WIN	LVL1	LVL2	LVL3	LVL4	LVL5	LVL6	MEAN	%RSD
TCX 6.18- 6.38	0.4595	0.5114	0.5438	0.5434	0.5583	0.5704	0.5312	7.6

roc.	lor-10:	16	LVL1	- 1	LVL2	- [	LVL3	-	LVL4	-	LVL5	-	LVL6	1	mean		&RSD
eak	RT	MIN	.02	1	0.05	1	0.1	-		•	0.5	•		•		•	R^2
1	8.18-	8.38	0.0127	1	0.0137	- <del>-</del> -	0.0140	 			0.0125				0.0129	1	6.0
2	8.67-	8.87	0.0388	- [	0.0418	- 1	0.0425	-	0.0396	1	0.0390		0.0384	1	0.0400	1	4.3
3	8.97-	9.17	0.0123		0.0144	ĺ	0.0149	1	0.0140	1	0.0138	-	0.0134		0.0138	1	6.5
4	9.75-	9.95	0.0139	- [	0.0149	ĺ	0.0160	ı	0.0148	ı	0.0146	I	0.0141	ı	0.0147	1	4.9

AROCLOR AVERAGE %RSD = 5.4

Aroclor-	-1260	LVL1	-	LVL2	-1	E.IVI.3	- 1	LVL4	- 1	LVL5		LVL6		MEAN		*RSD
Peak	RT WIN	. 02	١	0.05		0.1	1	.25		0.5	1	1.0	1		-	R^2
1 12.3	31-12.51	0.0491	1	0.0528	1	0.0511		0.0511		0.0472	 	0.0497	 	0.0502	1	3.9
2 12.9	8-13.18	0.1300	i	0.1509	Ì	0.1533	ĺ	0.1635	-1	0.1585	l	0.1747	ļ	0.1551	1	9.6
3 13.3	36-13.56	0.0548	Ì	0.0622	Ĺ	0.0625	Ī	0.0650	-	0.0614	-1	0.0659	-1	0.0620		6.4
4 13.4	16-13.66	0.0356	Ĺ	0.0404	ĺ	0.0408	-	0.0424	-	0.0400	1	0.0425	-1	0.0403	-	6.3
5 13.8	36-14.06	0.0162	Ĺ	0.0197	Ĺ	0.0199	- 1	0.0205	- 1	0.0194	- 1	0.0207	-1	0.0194		8.4

AROCLOR AVERAGE %RSD = 6.9

# 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 08/03/15

#### SURROGATES

i	RT WIN	LVL1	LVL2	1	LVL3	١	LVL4	1	LVLS	١	LVL6	1	mran	١	₹RSD	
	6.56- 6.76  5.22-15.42															

roclor-1016	LVL1	rv	L2	INT3	Ì	LVL4	1	LVL5	١	LVL6	- 1	MEAN	1	łrsd
eak RT WIN	.02	0.	05	0.1	1	.25	1	0.5	-	1.0	1		1	R^2
1 8.68- 8.88	0.0481	0.04	78	0.0466	 	0.0414		0.0386		0.0357		0.0430		12.2
2 9.39- 9.59	0.0957	0.09	55	0.0955	- 1	0.0864		0.0833	1	0.0792	-	0.0893	1	8.2
3 9.81-10.01	0.0250	0.02	56	0.0255	- 1	0.0230	1	0.0217		0.0205	-	0.0236	1	9.1
4 10.35-10.55	0.0339	0.03	47	0.0339	- 1	0.0302	- 1	0.0285	1	0.0267	- 1	0.0313	1	10.5

AROCLOR AVERAGE *RSD = 10.0

Aroclor-	1260	LVL1	1	LVL2		LVL3		LVL4	-	LVL5	-	LVL6	-	MEAN	-	*RSD
Peak	RT WIN	.02	- 1	0.05	-	0.1	- 1	.25	1	0.5	1	1.0	1		1	R^2
1 12.8	31-13.01	0.0940		0.0922	1	0.0897		0.0799		0.0745	1	0.0713	-	0.0836		11.5
2 13.5	6-13.76	0.1992	-	0.2005	-	0.1998	- 1	0.1867	- 1	0.1792	-	0.1768	- 1	0.1904	-	5.7
3 13.9	99-14.19	0.0651		0.0649	-	0.0637	1	0.0574	- 1	0.0536	1	0.0519	- 1	0.0594	-1	10.0
4 14.0	5-14.25	0.1332	- 1	0.1340	-	0.1333	- 1	0.1212		0.1155	- [	0.1129		0.1250	- 1	7.7

AROCLOR AVERAGE %RSD = 8.7

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00300           2         6.923         6.82-7.02         0.00486           3         7.047         6.95-7.15         0.01455           Aroclor-1232         Cal           Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172           2         7.046         6.95-7.15         0.00980           3         8.759         8.66-8.86         0.01696           4         9.658         9.56-9.76         0.00541           Aroclor-1242         Cal           Peak         RT         RT WIN         Factor           1         8.765         8.67-8.87         0.03076           2         9.063         8.96-9.16         0.01109           3         10.298         10.20-10.40         0.01405           4         10.544         10.44-10.64         0.01578    Aroclor-1248  Peak  RT  RT WIN  Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446 4 10.546 10.45-10.65 0.02496				
Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00300           2         6.923         6.82-7.02         0.00486           3         7.047         6.95-7.15         0.01455           Aroclor-1232         Cal           Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172           2         7.046         6.95-7.15         0.00980           3         8.759         8.66-8.86         0.01696           4         9.658         9.56-9.76         0.00541           Aroclor-1242         Cal           Peak         RT         RT WIN         Factor           1         8.765         8.67-8.87         0.03076           2         9.063         8.96-9.16         0.01109           3         10.298         10.20-10.40         0.01405           4         10.544         10.44-10.64         0.01578    Aroclor-1248  Peak  RT  RT WIN  Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446		Aroclo	r-1221	Cal.
2 6.923 6.82-7.02 0.00486 3 7.047 6.95-7.15 0.01455  Aroclor-1232 Cal Peak RT RT WIN Factor  1 4.946 4.85-5.05 0.00172 2 7.046 6.95-7.15 0.00980 3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446	Peak	RT	RT WIN	
2 6.923 6.82-7.02 0.00486 3 7.047 6.95-7.15 0.01455  Aroclor-1232 Cal Peak RT RT WIN Factor  1 4.946 4.85-5.05 0.00172 2 7.046 6.95-7.15 0.00980 3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446			4 05 5 05	1 0 00000
Aroclor-1232  Peak RT RT WIN Factor  1 4.946 4.85-5.05 0.00172 2 7.046 6.95-7.15 0.00980 3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242  Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Peak RT RT WIN Factor  Aroclor-1248  Cal  Peak RT RT WIN Factor  Aroclor-1248  Cal  Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446				E .
Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172           2         7.046         6.95-7.15         0.00980           3         8.759         8.66-8.86         0.01696           4         9.658         9.56-9.76         0.00541    Aroclor-1242  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Aroclor-1248  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Factor  1         9.409         9.31-9.51         0.00882           2         9.852         9.75-9.95         0.02086         0.02446	_		* * *	i i
Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172           2         7.046         6.95-7.15         0.00980           3         8.759         8.66-8.86         0.01696           4         9.658         9.56-9.76         0.00541    Aroclor-1242  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Aroclor-1248  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Factor  1         9.409         9.31-9.51         0.00882           2         9.852         9.75-9.95         0.02086         0.02446				
Peak         RT         RT WIN         Factor           1         4.946         4.85-5.05         0.00172           2         7.046         6.95-7.15         0.00980           3         8.759         8.66-8.86         0.01696           4         9.658         9.56-9.76         0.00541    Aroclor-1242  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  Aroclor-1248  Cal  Peak  RT WIN  Factor  Aroclor-1248  Cal  Peak  RT WIN  Factor  1         9.409         9.31-9.51         0.00882           2         9.852         9.75-9.95         0.02086         0.02446		Aroclo	r-1232	1
1 4.946 4.85-5.05 0.00172 2 7.046 6.95-7.15 0.00980 3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Peak RT RT WIN Factor  Aroclor-1248 Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446				
2 7.046 6.95- 7.15 0.00980 3 8.759 8.66- 8.86 0.01696 4 9.658 9.56- 9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67- 8.87 0.03076 2 9.063 8.96- 9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446	Peak	RT	RT WIN	Factor
3 8.759 8.66-8.86 0.01696 4 9.658 9.56-9.76 0.00541  Aroclor-1242 Cal Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446	1	4.946	4.85- 5.05	0.00172
Aroclor-1242  Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Peak RT RT WIN Factor  Aroclor-1248  Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446				
Aroclor-1242  Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446				
Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446	4 	9.658 	9.56- 9.76	0.00541
Peak RT RT WIN Factor  1 8.765 8.67-8.87 0.03076 2 9.063 8.96-9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248  Peak RT RT WIN Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446				
Peak         RT         RT WIN         Factor           1         8.765         8.67-8.87         0.03076           2         9.063         8.96-9.16         0.01109           3         10.298         10.20-10.40         0.01405           4         10.544         10.44-10.64         0.01578    Aroclor-1248  Cal  Peak  RT WIN  Factor  1 9.409 9.31-9.51 0.00882 2 9.852 9.75-9.95 0.02086 3 10.301 10.20-10.40 0.02446		Aroclo	r-1242	Col
2 9.063 8.96- 9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446	Peak	RT	RT WIN	
2 9.063 8.96- 9.16 0.01109 3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446			0.67.0.07	1 0 02076
3 10.298 10.20-10.40 0.01405 4 10.544 10.44-10.64 0.01578  Aroclor-1248 Cal Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446				
Aroclor-1248  Cal  Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446				1
Cal Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446	4	10.544	10.44-10.64	0.01578
Cal Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446				
Peak RT RT WIN Factor  1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446		Aroclo	or-1248	1
1 9.409 9.31- 9.51 0.00882 2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446				
2 9.852 9.75- 9.95 0.02086 3 10.301 10.20-10.40 0.02446	Peak	RT 	RT WIN	Factor
3 10.301 10.20-10.40 0.02446	1	9.409	9.31- 9.51	0.00882
				•
4 10.546 10.45-10.65   0.02496				I .
	4	1U.546	TO.45-TO.65	0.02430

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

1	Aroclo	r-1254	
			Cal
Peak	RT	RT WIN	Factor
1 10	0.306	10.21-10.41	0.01523
	0.627	10.53-10.73	0.02246
	1.007	10.91-11.11	0.01795
		11.05-11.25	0.03393
		11.76-11.96	0.02473
	<b></b>		
j	Aroclo	r-1262	
			Cal
Peak	RT	RT WIN	Factor
	2.408	12.31-12.51	0.10383
	3.085	12.99-13.19	0.27054
	3.461	13.36-13.56	0.07188
	3.625		0.12224
5 14	4.171	14.07-14.27	0.10332
	Aroclo	or-1268	]
•			Cal
Peak	RT	RT WIN	Factor
			<u></u>
1 1:	3.561	13.46-13.66	0.24308
2 1:	3.623	13.52-13.72	0.23035
3 1:	3.949	13.85-14.05	0.20684
4 1	4.555	14.46-14.66	0.63060

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

	Aroalo		 
	ALOCIO	1-1221	Cal
Peak	RT	RT WIN	Factor
1	1.000	0.90- 1.10	0.00821
2	7.507	7.41- 7.61	0.01368
3	7.793	7.69- 7.89	0.00799
<b>4</b> <b></b> -	7.933 	7.83-8.03	0.02412
·	Aroclo		
_			Cal
Peak	R <b>T</b>	RT WIN	Factor
1	1.000	- · · · · · · · · · · · · · · · · · · ·	0.00506
2	7.933	7.83- 8.03	0.01726
3	8.774	8.67- 8.87	0.01985
4 	9.902 	9.80-10.00	0.01037
	Aroclo		
			Cal
Peak	RT	RT WIN	Factor
	8.774	8.67- 8.87	0.03253
2	9.476	9.38- 9.58	0.06762
	10.903	10.80-11.00	0.02930
4 :	11.343	11.24-11.44	0.02943
	Aroclo	r-1248	
			Cal
Peak	RT	RT WIN	Factor
1	9.476	9.38- 9.5B	0.04417
1 2	9.476 10.447	9.38- 9.58 10.35-10.55	0.04417
1 2 3	9.476	9.38- 9.5B	0.04417

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Aroclo	or-1254	
Peak RT	RT WIN	Cal
Peak RT	KI WIN	Factor
1 11.220	11.12-11.32	0.04173
2 11.318	11.22-11.42	0.01974
3 11.756		0.03299
4 11.908	11.81-12.01	0.06503
5 12.687	12.59-12.79	0.04305
		<u>-</u>
Aroclo	r-1262	1
		Cal
Peak RT	RT WIN	Factor
1 12.948	12.85-13.05	0.15518
2 13.432		0.14324
3 13.659		0.29125
	14.04-14.24	0.12507
5 14.686	14.59-14.79	0.09594
Aroclo	or-1268	 
ALOCIC		Cal
Peak RT	RT WIN	Factor
1 14.144	14.04-14.24	0.21797
2 1.000	0.90- 1.10	0.20396
3 1.000	0.90- 1.10	0.16487
4 15.027	14.93-15.13	0.46628

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/30/15

Lab Standard ID: AR1254 Time Analyzed: 0432

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=======================================	=====	=====	=====	======	======	=====
Aroclor-1254-1	10.31	10.21	10.41	264.7	250.0	5.9
Aroclor-1254-2	10.63	10.53	10.73	271.6	250.0	8.6
Aroclor-1254-3	11.01	10.91	11.11	275.7	250.0	10.3
Aroclor-1254-4	11.15	11.05	11.25	269.8	250.0	7.9
Aroclor-1254-5	11.86	11.76	11.96	266.6	250.0	6.6

AROCLOR AVG: 269.7 CAL %D = 7.9

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/30/15

Lab Standard ID: AR1660

Time Analyzed: 0453

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	TRUOMA	AMOUNT	₽D
				(ng)	(ng)	
=======================================		=====	==	=======	=======	=====
Aroclor-1016-1	8.28	8.18	8.38	254.5	250.0	1.8
Aroclor-1016-2	8.76	8.67	8.87	252.0	250.0	0.8
Aroclor-1016-3	9.06	8.97	9.17	263.0	250.0	5.2
Aroclor-1016-4	9.85	9.75	9.95	275.7	250.0	10.3
	•	•	•	•	•	•

AROCLOR AVG: 261.3 CAL %D = 4.5

Date Analyzed:09/30/15

Lab Standard ID: AR1660

Time Analyzed:0453

		RT W	MODM	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	=====	=====	=====	======	=======	=====
Aroclor-1260-1	12.40	12.31	12.51	295.9	250.0	18.4
Aroclor-1260-2	13.08	12.98	13.18	283.5	250.0	13.4
Aroclor-1260-3	13.45	13.36	13.56	277.7	250.0	11.1
Aroclor-1260-4	13.55	13.46	13.66	272.9	250.0	9.2
Aroclor-1260-5	13.96	13.86	14.06	271.8	250.0	8.7
	•	•				'

AROCLOR AVG: 280.4 CAL %D = 12.1

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed: 09/30/15

Lab Standard ID: AR1248 Time Analyzed: 0929

		RT W	MOOM	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	=====	=====	=====	======	======	=====
Aroclor-1248-1	9.41	9.31	9.51	266.1	250.0	6.4
Aroclor-1248-2	9.85	9.75	9.95	268.5	250.0	7.4
Aroclor-1248-3	10.30	10.20	10.40	268.7	250.0	7.5
Aroclor-1248-4	10.55	10.45	10.65	274.8	250.0	9.9

AROCLOR AVG: 269.5 CAL %D = 7.8

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/30/15

Lab Standard ID: AR1660 Time Analyzed: 0951

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	=====	=====	=====	=======	=======	=====
Aroclor-1016-1	8.28	8.18	8.38	253.3	250.0	1.3
Aroclor-1016-2	8.77	8.67	8.87	251.6	250.0	0.6
Aroclor-1016-3	9.07	8.97	9.17	261.9	250.0	4.8
Aroclor-1016-4	9.85	9.75	9.95	275.0	250.0	10.0
AIOCIOI I IOIO II	9.03	9.75	9.95	2/5.0	250.0	1 10.

AROCLOR AVG: 260.4 CAL %D = 4.2

Date Analyzed:09/30/15

Lab Standard ID: AR1660 Time Analyzed: 0951

		RT W	INDOW	CALC	NOM		
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D	
	=   ======	=====	=====	=======	======	====	
Aroclor-1260-1	12.41	12.31	12.51	326.6	250.0	30.6	
Aroclor-1260-2	13.08	12.98	13.18	301.2	250.0	20.5	
Aroclor-1260-3	13.46	13.36	13.56	292.6	250.0	17.0	
Aroclor-1260-4	13.56	13.46	13.66	286.9	250.0	14.7	
Aroclor-1260-5	13.96	13.86	14.06	282.0	250.0	12.8	

AROCLOR AVG: 297.9 CAL %D = 19.1

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/30/15

Lab Standard ID: AR1254 Time Analyzed: 0432

	RT W	INDOW	CALC	NOM	
RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=====	=====	=====	=======	======	=====
11.22	11.12	11.32	259.5	250.0	3.8
11.31	11.22	11.42	267.1	250.0	6.8
11.75	11.66	11.86	267.6	250.0	7.0
11.90	11.81	12.01	257.3	250.0	2.9
12.68	12.59	12.79	255.2	250.0	2.1
	11.22 11.31 11.75 11.90	RT FROM  ====== 11.22 11.12 11.31 11.22 11.75 11.66 11.90 11.81	=====	RT FROM TO AMOUNT (ng) ====================================	RT FROM TO AMOUNT (ng) ======= 11.22 11.12 11.32 259.5 250.0 11.31 11.22 11.42 267.1 250.0 11.75 11.66 11.86 267.6 250.0 11.90 11.81 12.01 257.3 250.0

AROCLOR AVG: 261.3 CAL %D = 4.5

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/30/15

Lab Standard ID: AR1660

Time Analyzed: 0453

		RT W	MDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
		=====	======	=======		****
Aroclor-1016-1	8.78	8.68	8.88	236.1	250.0	-5.6
Aroclor-1016-2	9.48	9.39	9.59	238.7	250.0	-4.5
Aroclor-1016-3	9.90	9.81	10.01	246.5	250.0	-1.4
Aroclor-1016-4	10.45	10.35	10.55	193.1	250.0	-22.8
	•	'	'		•	'

AROCLOR AVG: 228.6 CAL %D = -8.6

Date Analyzed:09/30/15

Lab Standard ID: AR1660 Time Analyzed: 0453

		RT W	MODM	CALC	NOM		
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D	
	=   ======	=====	=====		======	====	
Aroclor-1260-1	12.91	12.81	13.01	324.7	250.0	29.9	<
Aroclor-1260-2	13.66	13.56	13.76	258.9	250.0	3.5	
Aroclor-1260-3	_   14.09	13.99	14.19	265.9	250.0	6.4	
Aroclor-1260-4	_   14.14	14.05	14.25	256.4	250.0	2.6	

AROCLOR AVG: 276.4 CAL %D = 10.6

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/30/15

Time Analyzed: 0929 Lab Standard ID: AR1248

		RT W	INDOW	CALC	MOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
			=====	=======	======	=====
Aroclor-1248-1	9.48	9.38	9.58	252.7	250.0	1.1
Aroclor-1248-2	10.45	10.35	10.55	218.8	250.0	-12.5
Aroclor-1248-3	10.99	10.88	11.08	249.9	250.0	-0.0
Aroclor-1248-4	11.35	11.24	11.44	258.9	250.0	3.5
	•	•		'	•	

AROCLOR AVG: 245.1 CAL %D = -2.0

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 08/03/15

Date Analyzed:09/30/15

Lab Standard ID: AR1660

Time Analyzed: 0951

•		RT W	NDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	%D
				(ng)	(ng)	
Aroclor-1016-1	8.78	8.68	8.88	237.4	250.0	-5.0
Aroclor-1016-2	9.49					
Aroclor-1016-3	9.91	9.81	10.01	248.0	250.0	-0.8
Aroclor-1016-4	10.45	10.35	10.55	195.6	250.0	-21.8
· · · · · · · · · · · · · · · · · · ·		, , ,	1			

AROCLOR AVG: 230.5 CAL D = -7.8

Date Analyzed:09/30/15

Lab Standard ID: AR1660 Time Analyzed: 0951

		RT W	INDOW	CALC	NOM		
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D	
	=====	=====	=====	======	======	=====	
Aroclor-1260-1	12.91	12.81	13.01	375.0	250.0	50.0	<
Aroclor-1260-2	13.66	13.56	13.76	275.5	250.0	10.2	
Aroclor-1260-3	14.09	13.99	14.19	274.0	250.0	9.6	
Aroclor-1260-4	14.14	14.05	14.25	264.3	250.0	5.7	

AROCLOR AVG: 297.2 CAL %D = 18.9

FORM VII PCB

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA4

Project: JFOS3

GC Column: ZB5

ID: 0.53 (mm)

Instrument ID: ECD7

Init. Calib. Date: 08/03/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

						IS1 AREA	RT	IS2 ARKA	RT
			ICAL MIDPT		6328212	3.263	5068453		
					LIMIT	12656424	3.363	10136906	
					LIMIT	3164106	3.163	2534226	
1	CLIENT	LAB	1	ATE		IS1		182	
	SAMPLE NO.	SAMPLE ID	AN	LYZED	TIME	AREA	RT	AREA	RT
					=====	========	======	========	
01	ZZZZZ	ZZZZZ	08,	03/15	1716	6222621	3.258	5047030	15.102
02		0.25PPMAR166	08/	03/15	1737	6328212	3.263	5068453	15.102
03		0.02PPMAR166	08	03/15	1758	6326177	3.262	5154907	15.102
04		0.05PPMAR166	08/	03/15	1820	6210580	3.264	5033371	15.102
05		1PPMAR1660	08/	03/15	1841	6160991	3.266	4985647	15.103
06		0.1PPMAR1660	08,	03/15	1902	6344317	3.268	5407220	15.103
07		0.5PPMAR1660	08/	03/15	1924	6159955	3.267	5303929	15.103
08		AR1242	08/	03/15	1945	6219986	3.265	5066767	15.103
09		AR1248	08/	03/15	2007	6249050	3.265	5356854	15.103
10		AR1254	08/	03/15	2028	6326911	3.267	5032449	15.103
11		AR2162	08/	03/15	2049	6246099	3.266	4938617	15.103
12		AR3268		03/15	2111	6259531	3.265	5003661	15.103
13	ZZZZZ	ZZZZZ		03/15	2132	6338133	3.267	5037306	15.103
14	ZZZZZ	ZZZZZ		03/15	2153	6038309	3.262	5048403	15.103
15	ZZZZZ	ZZZZZ		03/15	2214	6208035	3.265	5032536	15.103
16	ZZZZZ	ZZZZZ		03/15	2236	6278544	3.265	5100405	15.103
17	ZZZZZ	ZZZZZ		03/15	2257	6251565	3.264	5061467	15.103
18	EZZZZ	ZZZZZ		03/15	2318	6317415	3.264	5061451	15.102
19		AR1254		30/15	0432	8310195	3.278	5894481	15.094
20		AR1660	,	30/15	0453	8404933	3.278	6075148	15.094
21	ANA4MBS1	ANA4MBS1		30/15	0514	8589569	3.280	6421435	15.094
22	ANA4LCSS1	ANA4LCSS1		30/15	0535	8551626	3.281	6352695	15.095
23	JF083-PC11+1	ANA4A		/30/15	0557	8678958	3.280	6613108	15.094
24		AR1248	•	/30/15	0929	8373135	3.285	5533284	15.095
25		AR1660	09,	/30/15	0951	8532464	3.286	5696459	15.095
	l <u></u> _	<u> </u>	l		l				

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

^{*} Indicates value outside QC Limits

# FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA4 Project: JFOS3

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD7

Init. Calib. Date: 08/03/15

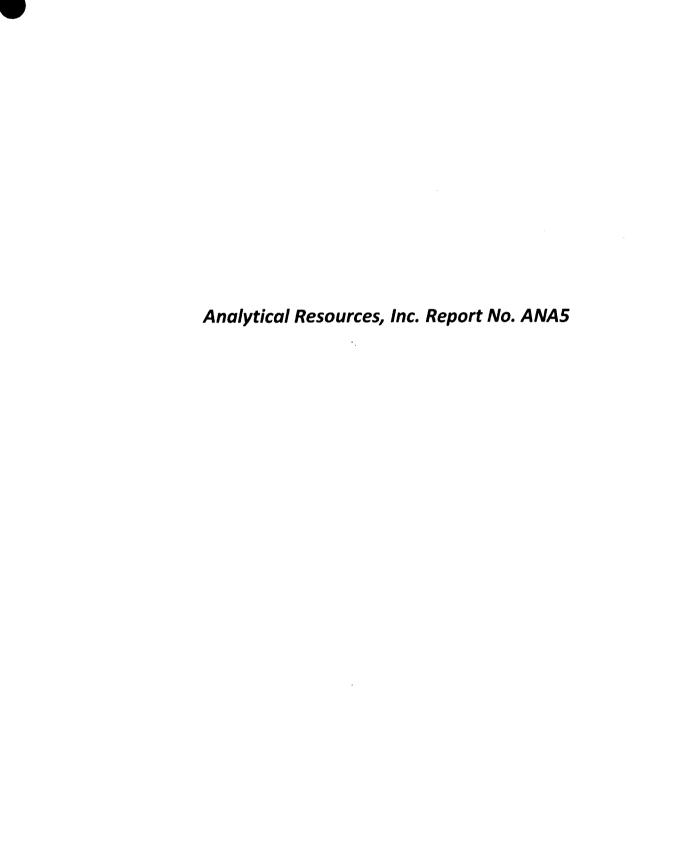
THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

			1	•		IS1		IS2	
			İ			AREA	RT	AREA	RT
			i				======	*******	
			İ	ICAL MIDPT 1		12901249	4.365	7598346	15.906
				UPPER	LIMIT	25802498	4.465	15196692	16.006
			- 1	LOWER	LIMIT	6450624	4.265	3799173	15.806
			l			<u>  </u>			
[	CLIENT	LAB	I	ATE		IS1		IS2	
ļ	SAMPLE NO.	SAMPLE ID	ANA	TAKED	TIME	AREA	RT	AREA	RT
1	*==========		,	=====		######################################	======		======
01	ZZZZZ	ZZZZZ		03/15	1716	12615423	4.360	7577981	15.906
02	1	0.25PPMAR166		03/15	1737	12901249	4.365	7598346	15.906
03		0.02PPMAR166		03/15	1758	12889538	4.366	7674080	15.906
04		0.05PPMAR166		03/15	1820	12701605	4.367	7596138	15.906
05		1PPMAR1660		03/15	1841	12722963	4.369	7648810	15.907
06		0.1PPMAR1660	!	03/15	1902	13013744	4.371	7786984	15.907
07		0.5PPMAR1660		03/15	1924	12706249	4.370	7776969	15.907
08		AR1242		03/15	1945	12825517	4.369	7804063	15.906
09		AR1248		03/15	2007	12932061	4.369	7871936	15.906
10		AR1254	, ,	03/15	2028	13098041	4.370	7793570	15.907
11		AR2162	, .	03/15	2049	12808024	4.369	7735916	15.907
12		AR3268		03/15	2111	12831845	4.369	7828166	15.907
13	ZZZZZ	ZZZZZ		03/15	2132	13048327	4.369	7840797	15.907
14	ZZZZZ	ZZZZZ		03/15	2153	12451023	4.366	7728754	15.907
15	ZZZZZ	ZZZZZ		03/15	2214	12732082	4.367	7695088	15.907
16	ZZZZZ	ZZZZZ		03/15	2236	12892489	4.368	7804248	15.906
17	ZZZZZ	ZZZZZ		03/15	2257	12666986	4.367	7848857	15.907
18	ZZZZZ	ZZZZZ	•	03/15	2318	12781896	4.367	7841933	15.907
19		AR1254	•	30/15	0432	13884909	4.390	7368352	15.906
20		AR1660		30/15	0453	14140256	4.391	7661890	15.906
21	ANA4MBS1	ANA4MBS1		30/15	0514	14242912	4.392	7892618	15.906
22	ANA4LCSS1	ANA4LCSS1		30/15	0535	14251099	4.393	7797255	15.906
23	JFOS3-PC11+1	ANA4A	•	30/15	0557	13735682	4.392	<u>!</u>	15.905
24		AR1248		30/15	0929	14051784	4.397	•	15.906
25		AR1660	09/	30/15	0951	14316341	4.397	6504673	15.907
		<u> </u>	l		l	l		·	

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

^{*} Indicates value outside QC Limits



SoundEarth Strategies, Inc.



6 October 2015

Dee Gardner Sound Earth Strategies, Inc. 2811 Fairview Avenue East, Suite 2000 Seattle, WA 98102

RE: JFOS3

ARI Job No.: ANA5

Dear Dee:

Please find enclosed the original chain of custody record and the final results for the sample from the project referenced above. Analytical Resources, Inc. received one soil sample on September 23, 2015. The sample was analyzed for PCBs as requested.

This analysis proceeded without incident of note.

If you have any questions regarding these results, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Project Manager 206/695-6210

markh@arilabs.com

cc: Miles Dyer, Jorgensen Forge file ANA5

**Enclosures** 

#### **Chain of Custody Record & Laboratory Analysis Request**

ARI Client Company:  Joe Gensent Project Corp.  Joe Gensent Project Name:  Client Project #:  Samplers:  J. LOEFFLER  Samplers:  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  Samplers:  J. LOEFFLER  Samplers:  Samplers:  J. LOEFFLER  Samplers:  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J. LOEFFLER  Samplers:  J		Turn-around Requested: STANDARD Phone:				Page: of					Analytical Resources, Incorporate Analytical Chemists and Consultar 4611 South 134th Place, Suite 100			
Client Project Name:  Client Project Name:  Client Project Name:  Samplers:  Samplers:  Samplers:  Sample ID  Date  Time  Matrix  Ne. Continuous  Page 1  Analysis Requested  Notes/Comments  STAGE 2R  SLEPGET ING  PER SAP/QAF  CMP24-BIO+05R  9/23/15  Comments  Notes/Comments  Analysis Requested  Notes/Comments  STAGE 2R  SLEPGET ING  PER SAP/QAF  CMP24-BIO+05R  9/23/15  Comments  Notes/Comments  Analysis Requested  Notes/Comments  STAGE 2R  SLEPGET ING  PER SAP/QAF  Received by:  (Signature)  Signature)  Received by: (Signature)  Signature)  Period Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:  Protect Name:	ARI Client Company:  JOE GENSEN FORGE	CORP.	Phone: 20	6.76Z.	1100	Date: 9/23/15   Resent?				1	Tukwila, WA 98168			
Comments/Special Instructions  CC: DEE GARDNER AND  Comments Special Instructions  CC: DEE GARDNER AND  COMMENTS Samplers:  J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. O. J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER  J. LOEFFLER	Client Contact: MILES DYE	R.				No. of Coolers:								
Comments/Special Instructions  CC: DEE GARDNER AND  Comments Special Instructions  CC: DEE GARDNER AND  COMMENTS Samplers:  J. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D. LOEFFLER  J. D.	Client Project Name: TEOS	<u>২</u>							Analysis I	Requested		T	· · · · ·	Notes/Comments
Sample ID  Date  Time  Matrix  No. Containers  D  S  S  S  S  S  S  S  S  S  S  S  S		Complem	J, LOEF	FUER		ьу 3082								i e
COMP24-BIO+05R 9/23/15 0850 H20 I X  The structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structions of the structi	Sample ID	Date	Time	Matrix	No. Containers									PER SAP/QAPP
Comments/Special Instructions CC: DEE GARDNER AND Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name:	CMP24-B10+05R	9/23/15	0850	H ₂ O	l									
Comments/Special Instructions CC: DEE GARDNER AND Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name:														
Comments/Special Instructions CC: DEE GARDNER AND Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name:												<u> </u>		
Comments/Special Instructions CC: DEE GARDNER AND Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name:							91	,						
Comments/Special Instructions CC: DEE GARDNER AND Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name: Printed Name:							0777	9/2	3/15					·
CC: DEE GARDNER AND (Signature) (Signature) (Signature)  (Signature) (Signature)  Printed Name: Printed Name: Printed Name:												<u> </u>		
CC: DEE GARDNER AND (Signature) (Signature) (Signature)  (Signature) (Signature) (Printed Name: Printed Name:														
CC: DEE GARDNER AND (Signature) (Signature) (Signature)  (Signature) (Signature)  Printed Name: Printed Name: Printed Name:														
CC: DEE GARDNER AND (Signature) (Signature) (Signature)  (Signature) (Signature)  Printed Name: Printed Name: Printed Name:														
CC: DEE GARDNER AND (Signature) (Signature) (Signature)  (Signature) (Signature)  (Printed Name: Printed Name: Printed Name:														
Printed Name: Printed Name: Printed Name: Printed Name:	•	1	Ste		1	W	$\langle$			l by:			· ·	i ''
C CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE CONTINUE C	JONATHAN LOEFFLER AT		ATHAN CO	effler	Printed Name:	////	LHW	·ν	Printed Nam	e:			Printed Nam	6:
SOUNDEARTH Company: Company: Company: Company:	Mariak racer sayadasakki a asis	Company:	NOEART	H		R-1	<u> </u>		Company:				Company:	· · · · · · · · · · · · · · · · · · ·
Agardner@scundearthinc.com  SouNDEARTH  THI  Date & Time:  1 oz ffler@sandearthinc.com  Date & Time:  9 / 2 3 / 15 @ 1027	glorifler psandeorthine.com	Date & Time:	23/15 6	21027	Date & Time:	3/15	, (	027	Date & Time		<del></del>		Date & Time	

Simits of Liability: ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program greets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for gaid services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or conjugated agreement between ARI and the Client.

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sconer than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless afternate retention schedules have been established by work-order or contract.



## **Cooler Receipt Form**

ARI Client: Orgens	sen Forge	Project Name: JF05 3	)		
COC No(s):	NA	Delivered by: Fed-Ex UPS Cour	ier Hand Deliv	vered/Other:	
Assigned ARI Job No:	16	Tracking No:			NA /
Preliminary Examination Phase:					
Were Intact, properly signed and	dated custody seals attached to	the outside of to cooler?		YES .	(NO)
Were custody papers included wi	th the cooler?			(ES)	NO
Were custody papers properly fill	ed out (ink, signed, etc.)	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(	(YES)	NO
Temperature of Cooler(s) (°C) (re Time:		mistry) <u>5. 2</u>			- <del></del>
If cooler temperature is out of cor	npliance fill out form 00070F	0.50	Temp Gun I	#: DCX	200S
Cooler Accepted by:	W	Date:	: 1027	· ·	
	Complete custody forms	and attach all shipping documents			
Log-In Phase:			•		
Was a temperature blank include	d in the cooler?	***************************************		YES	(ON)
What kind of packing material v		Wet Ice Gel Packs Baggies Foam	Block Paper (	Other:	
Was sufficient loe used (if approp	riate)?		NA	(YES)	NO
Were all bottles sealed in individu	ıal plastic bags?			YES	NO
Did all bottles arrive in good cond	lition (unbroken)?			YES	NO
Were all bottle labels complete a	nd legible?			YES	NO
Did the number of containers liste	ed on COC match with the numb	per of containers received?		(YES)	NO
- <del>-</del>				(YES)	МО
Were all bottles used correct for I	•			(ES)	NO
• • • • • • •		eservation sheet, excluding VOCs)	(NA)	YES	NO
Were all VOC vials free of air but			(NA)	YES	NO
• •			(NA)	(YES)	NO
Was Sample Split by ARI: N	<b>'</b>			Split by:_	
1	. ()	C La-	10 1		<del></del>
Samples Logged by:	Date	·	1364	<u>.</u>	
	** Notify Project Manage	r of discrepancies or concerns **			
Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sam	ple ID on Co	oc
	· · · · · · · · · · · · · · · · · · ·				
		<del></del>			
			<del></del>		
Additional Notes, Discrepance	s, & Resolutions:		<u> </u>	·	
	•				ļ
By: Da	ale:		<del></del>		
Small Air Bubbles Peobubl  "2mm 2-4 m		Small → "sm" (<2 mm)	· · · · · · · · · · · · · · · · · · ·	<del></del>	
2-4 /1	7 >4 mm	Peabubbles > "pb" (2 to < 4 mm)			
•	• 3 4 4	Large → "lg" (4 to < 6 mm)	<del></del>		·
		Headspace → "hs" (>6 mm)			

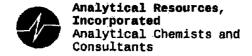
#### Sample ID Cross Reference Report



ARI Job No: ANA5 Client: Jorgensen Forge Project Event: N/A Project Name: JFOS3

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	CMP24-B10+05R	ANA5A	15-17008	Water	09/23/15 08:50	09/23/15 10:27

Printed 09/23/15 Page 1 of 1



## Data Reporting Qualifiers Effective 12/31/13

#### **Inorganic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Duplicate RPD is not within established control limits
- B Reported value is less than the CRDL but ≥ the Reporting Limit
- N Matrix Spike recovery not within established control limits
- NA Not Applicable, analyte not spiked
- H The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
- L Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

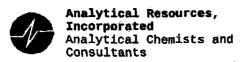
#### **Organic Data**

- U Indicates that the target analyte was not detected at the reported concentration
- * Flagged value is not within established control limits
- B Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
- J Estimated concentration when the value is less than ARI's established reporting limits
- D The spiked compound was not detected due to sample extract dilution
- E Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

Laboratory Quality Assurance Plan

Page 1 of 3

Version 14-003 12/31/13



- Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).
- S Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
- NA The flagged analyte was not analyzed for
- NR Spiked compound recovery is not reported due to chromatographic interference
- NS The flagged analyte was not spiked into the sample
- M Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
- Y The analyte is not detected at or above the reported concentration.

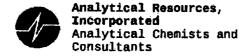
  The reporting limit is raised due to chromatographic interference.

  The Y flag is equivalent to the U flag with a raised reporting limit.
- EMPC Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" (Dioxin/Furan analysis only)
- C The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
- P The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
- X Analyte signal includes interference from polychlorinated dipheriyl ethers. (Dioxin/Furan analysis only)
- Z Analyte signal includes interference from the sample matrix or perfluorokerosene ions. (Dioxin/Furan analysis only)

Laboratory Quality Assurance Plan

Page 2 of 3

Version 14-003 12/31/13



#### **Geotechnical Data**

- A The total of all fines fractions. This flag is used to report total fines when only sleve analysis is requested and balances total grain size with sample weight.
- F Samples were frozen prior to particle size determination
- SM Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
- SS Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
- Weight of sample in some pipette aliquots was below the level required for accurate weighting



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3510C

Page 1 of 1

Lab Sample ID: MB-092915

LIMS ID: 15-17008

Matrix: Water

Data Release Authorized:

Reported: 10/06/15

Date Extracted: 09/29/15
Date Analyzed: 10/01/15 01:31

Instrument/Analyst: ECD7/JGR

GPC Cleanup: No Sulfur Cleanup: Yes Sample ID: MB-092915

METHOD BLANK

QC Report No: ANA5-Jorgensen Forge

Project: JFOS3

Date Sampled: NA Date Received: NA

Sample Amount: 500 mL Final Extract Volume: 5.0 mL

Dilution Factor: 1.00

Silica Gel: No Acid Cleanup: Yes

CAS Number	Analyte	LOQ	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U
37324-23-5	Aroclor 1262	1.0	< 1.0 U
11100-14-4	Aroclor 1268	1.0	< 1.0 U

Reported in µg/L (ppb)

#### PCB Surrogate Recovery

Decachlorobiphenyl	64.8%
Tetrachlorometaxylene	68.5%

FORM I



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A Extraction Method: SW3510C

Page 1 of 1

Lab Sample ID: ANA5A

LIMS ID: 15-17008

Matrix: Water

Data Release Authorized: WW

Reported: 10/06/15

Date Extracted: 09/29/15

Date Analyzed: 10/01/15 02:34 Instrument/Analyst: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

QC Report No: ANA5-Jorgensen Forge

SAMPLE

Project: JFOS3

Date Sampled: 09/23/15 Date Received: 09/23/15

Sample Amount: 500 mL Final Extract Volume: 5.0 mL

Dilution Factor: 1.00

Silica Gel: No Acid Cleanup: Yes

CAS Number	Analyte	TOÖ	Result
12674-11-2	Aroclor 1016	1.0	< 1.0 U
53469-21-9	Aroclor 1242	1.0	< 1.0 U
12672-29-6	Aroclor 1248	1.0	< 1.0 U
11097-69-1	Aroclor 1254	1.0	< 1.0 U
11096-82-5	Aroclor 1260	1.0	< 1.0 U
11104-28-2	Aroclor 1221	1.0	< 1.0 U
11141-16-5	Aroclor 1232	1.0	< 1.0 U
37324-23-5	Aroclor 1262	1.0	< 1.0 U
11100-14-4	Aroclor 1268	1.0	< 1.0 U

Reported in µg/L (ppb)

#### PCB Surrogate Recovery

	_
Decachlorobiphenyl	69.0%
Tetrachlorometaxylene	75.2%



#### SW8082/PCB WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: ANA5-Jorgensen Forge Project: JFOS3

Client ID	DCBP % REC	DCBP LCL-UCL	TCMX % REC	TCMX LCL-UCL	TOT OUT
MB-092915 LCS-092915 LCSD-092915 CMP24-B10+05R	64.8% 64.2% 67.0% 69.0%	38-120 38-120 38-120 38-120	72.2% 71.2%	29-120 29-120 29-120 29-120	0 0 0

Prep Method: SW3510C Log Number Range: 15-17008 to 15-17008



ORGANICS ANALYSIS DATA SHEET PCB by GC/ECD Method SW8082A

Page 1 of 1

Lab Sample ID: LCS-092915

LIMS ID: 15-17008

Matrix: Water

Data Release Authorized MWW

Reported: 10/06/15

Date Extracted LCS/LCSD: 09/29/15

Date Analyzed LCS: 10/01/15 01:52 LCSD: 10/01/15 02:13

Instrument/Analyst LCS: ECD7/JGR LCSD: ECD7/JGR

GPC Cleanup: No

Sulfur Cleanup: Yes

Sample ID: LCS-092915

LCS/LCSD

QC Report No: ANA5-Jorgensen Forge

Project: JFOS3

Date Sampled: NA

Date Received: NA

Sample Amount LCS: 500 mL

LCSD: 500 mL

Final Extract Volume LCS: 5.0 mL

LCSD: 5.0 mL

Dilution Factor LCS: 1.00

LCSD: 1.00

Silica Gel: No Acid Cleanup: Yes

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD	
Aroclor 1016	3.85	5.00	77.0%	3.94	5.00	78.8%	2.3%	
Aroclor 1260	4.10	5.00	82.0%	4.27	5.00	85.4%	4.1%	

#### PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	64.2%	67.0%
Tetrachlorometaxylene	72.2%	71.2%

Results reported in µg/L RPD calculated using sample concentrations per SW846.

FORM III

### 4 PCB METHOD BLANK SUMMARY

BLANK NO.

ANA5MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

Lab Sample ID: ANA5MBW1

Lab File ID: 09301531

Date Extracted: 09/29/15

Matrix: LIQUID

Date Analyzed: 10/01/15

Instrument ID: ECD7

Time Analyzed: 0131

GC Columns: ZB5/ZB35

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	CLIENT	LAB	DATE
	SAMPLE NO.	SAMPLE ID	ANALYZED
	=======================================		
01	ANA5LCSW1	ANA5LCSW1	10/01/15
02	ANA5LCSDW1	ANA5LCSDW1	10/01/15
03	CMP24-B10+05R	ANA5A	10/01/15
			,

ALL RUNS ARE DUAL COLUMN

#### 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Calibration Date: 09/30/15

#### SURROGATES

į	RT WIN	LVL1	LVL2	1	LVL3	LVL4	ì	LVLS	1	LVL6	}	mean	1	*RSD	İ
TCX	6.18- 6.38	0.4869 1.9999	0.4885	) (	0.5046 L.5777	0.5100		0.5313 1.4611	1	0.5331 1.4311	1	0.5091 1.6105	1	3.9 14.0	 

	lor-1016     RT WIN						•		•	LVL5	•		•	MEAN	-	%RSD R^2
				0.05 		·	- <del>-</del>	.23	 				 :			
1	8.18- 8.38	0.0141	ļ	0.0130	ı	0.0132	1	0.0124	1	0.0122	١	0.0115	1	0.0127	1	7.0
2	8.67- 8.87	0.0416	1	0.0413	-	0.0411	-	0.0390	-1	0.0392	١	0.0379	1	0.0400	Ì	3.8
3	8.97~ 9.17	0.0130	- [	0.0141	1	0.0142	1	0.0137	-	0.0137	-	0.0132	-	0.0137	-	3.5
4	9.75- 9.95	0.0153	1	0.0157	-	0.0156	1	0.0148	- 1	0.0148	-1	0.0141	1	0.0150	1	4.0

AROCLOR AVERAGE %RSD = 4.6

Aroclor	-1260 )	LVL1	1	LVL2	1	LVL3	- 1	LVL4	- }	LVL5	- 1	LVL6		MEAN	- 1	₹RSD
Peak	RT WIN	.02	1	0.05	1	0.1	İ	.25		0.5	١	1.0	1		1	R^2
1 12.	30-12.50	0.0648		0.0613		0.0605		0.0598		0.0586		0.0568	1	0.0603		4.5
2 12.	98-13.18	0.1631	1	0.1619	1	0.1670	-	0.1740	- 1	0.1795	-	0.1813		0.1711	1	4.9
3 13.3	35-13.55	0.0657	-	0.0653	- {	0.0664	- 1	0.0676	ļ	0.0680	į	0.0672	-	0.0667	- }	1.6
4 13.4	45-13.65	0.0448	1	0.0428	Ì	0.0430	ı	0.0435	- 1	0.0435	- 1	0.0425	1	0.0433	1	1.9
5 13.8	86-14.06	0.0220	i	0.0219	Ĺ	0.0211	Ĺ	0.0209	ĺ	0.0206	1	0.0201	1	0.0211	Ĺ	3.4

AROCLOR AVERAGE %RSD = 3.3

#### 6F 8082 INITIAL CALIBRATION OF AROCLOR 1016/1260

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 09/30/15

#### SURROGATES

RT WIN	LVL1	LVL2	rvr3	LVL4	LVL5	LVL6	MEAN	%RSD
TCX 6.57- 6.77	•	•	= '	-	= '	-		

Arocl	or-1016	LVL1		LVL2	-	LVL3	- 1	LVL4	-	LVL5	- 1	LVL6	- [	mran	-1	*RSD
Peak	RT WIN	.02	)	0.05	•		•		•		•				•	
1	8.68- 8.88	0.0518	1	0.0466												
2	9.39- 9.59	0.1013	Ì	0.0928	Ì	0.0905	Ì	0.0825	Ì	0.0802	İ	0.0746	İ	0.0870	j	11.1
3	9.81-10.01	0.0256	-	0.0250	-1	0.0244	-	0.0222	-1	0.0212	-	0.0197	-	0.0230	1	10.1
4 1	0.35-10.55	0.0344	1	0.0324	- 1	0.0312	1	0.0284	١	0.0272	1	0.0253	- 1	0.0298	1	11.4

AROCLOR AVERAGE %RSD = 12.1

Aroclor.	-1260	LVL1		LVL2	-1	LVL3	- 1	LVL4	ĺ	LVL5	1	LVL6		mean	-	*RSD
Peak	RT WIN	.02	Ì	0.05					•		•		•			R^2
1 12.8	31-13.01	0.1411	1	0.1230										0.1143		
	6-13.76										-					
3 13.9	9-14.19	0.0791	Ì	0.0694	1	0.0650	- 1	0.0580	-	0.0571	-	0.0530	-	0.0636	1	15.1
4 14.0	5-14.25	0.1561	-	0.1407	1	0.1372	1	0.1237	-1	0.1243		0.1158	-1	0.1330	-1	11.0

AROCLOR AVERAGE %RSD = 11.9

FORM VI PCB-1

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB5

Instrument ID: ECD7

Calibration Date: 09/30/15

	Aroclo		
Peak	RT	RT WIN	Cal Factor
2	4.961 6.935 7.060	4.86- 5.06 6.84- 7.04 6.96- 7.16	0.00283 0.00465 0.01406
Peak	Aroclo	r-1232 RT WIN	Cal   Factor
_	4.960 7.057 8.765 9.661	4.86- 5.06 6.96- 7.16 8.66- 8.86 9.56- 9.76	0.00157 0.00920 0.01630 0.00525
Peak	Aroclo	r-1242 RT WIN	Cal Factor
2 3 :	8.768 9.065 10.299		0.03058 0.01086 0.01433 0.01603
Peak		r-1248 RT WIN	Cal   Factor
2 3	9.403 9.847 10.297 10.542	9.30- 9.50 9.75- 9.95 10.20-10.40 10.44-10.64	0.00814 0.01928 0.02293 0.02321

FORM VI PCB-2A

page 1 of 2

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5 Project: JFOS3

GC Column: ZB5 Instrument ID: ECD7

Calibration Date: 09/30/15

	Aroclo	or-1254	Cal
Peak	RT	RT WIN	Factor
	0.306		0.01495
	0.626	10.53-10.73	0.02250
	1.007	10.91-11.11	0.01784
	1.145		0.03371
5 1	1.859	11.76-11.96	0.02434
	ALOCTO	r-1262	0-1
- ·	200	DE 11717	Cal
Peak	RT	RT WIN	Factor
1 1	2.404	12.30-12.50	0.07896
2 1	3.079	12.98-13.18	0.18539
3 1	3.454	13.35-13.55	0.04855
4 1	3.618	13.52-13.72	0.07904
5 1	4.164	14.06-14.26	0.06398
	Aroclo	r-1268	
			Cal
Peak	RT	RT WIN	Factor
		10 45 10 65	
	3.555	13.45-13.65	0.23016
	3.617	13.52-13.72	0.21624
_	3.942		0.19228
4 1	4.547	14.45-14.65	0.54029

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 09/30/15

	Aroclo	r-1221	
<u> </u>			Cal
Peak	RT	RT WIN	Factor
1	5.768	5.67- 5.87	0.00782
	7.493	7.39- 7.59	0.01292
	7.795	7.69- 7.89	0.00749
4	7.935	7.84- 8.04	0.02264
	Aroclo	r-1232	
			Cal
Peak	RT	RT WIN	Factor
1	- <b></b> 5.767	5.67- 5.87	0.00476
	7.934	7.83- 8.03	0.01608
3	8.779	8.68- 8.88	0.01883
4	9.903	9.80-10.00	0.00983
	Aroclo	r-1242	
			_Cal
Peak	RT	RT WIN	Factor
1	8.781	8.68- 8.88	0.03153
	9.487	9.39- 9.59	0.06518
3 1	0.906	10.81-11.01	0.02886
4 1	1.348	11.25-11.45	0.02919
{	Aroclo	r-1248	
			_Cal
Peak	RT	RT WIN	Factor
1	9.481	9.38- 9.58	0.03895
2 1	0.452	10.35-10.55	0.03290
	0.988	10.89-11.09	0.03431
4 1	1.349	11.25-11.45	0.04457

FORM VI PCB-2A

page 1 of 2

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5 Project: JFOS3

GC Column: ZB35 Instrument ID: ECD7

Calibration Date: 09/30/15

Arc	clor-1254	
Peak F	T RT WIN	Cal Factor
1 11.2 2 11.3 3 11.7 4 11.9 5 12.6	18 11.22-11.42 257 11.66-11.86 209 11.81-12.01	0.03999 0.01897 0.03150 0.06224 0.04037
Arc	clor-1262	
Peak R	T RT WIN	Cal Factor
1 12.9 2 13.4 3 13.6 4 14.1 5 14.6	31 13.33-13.53 58 13.56-13.76 45 14.04-14.24	0.05308 0.10909 0.21531 0.13699 0.06737
l	clor-1268	Cal
Peak F	T RT WIN	Factor
1 14.0 2 14.1 3 14.4 4 15.0	45 14.05-14.25	0.22060 0.20647 0.16601 0.44811

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed:09/30/15

Lab Standard ID: AR1254

Time Analyzed :2344

		RT W	ENDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT	AMOUNT	₹D
	1			(ng)	(ng)	
*======================================	**====	======	=====	2222688	=======	=====
Aroclor-1254-1	10.31	10.21	10.41	250.0	250.0	-0.0
Aroclor-1254-2	10.63	10.53	10.73	249.3	250.0	-0.3
Aroclor-1254-3	11.01	10.91	11.11	249.1	250.0	-0.3
Aroclor-1254-4	11.14	11.04	11.24	249.1	250.0	-0.4
Aroclor-1254-5	11.86	11.76	11.96	249.8	250.0	-0.1

AROCLOR AVG: 249.5 CAL %D = -0.2

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed :10/01/15

Lab Standard ID: AR1660

Time Analyzed: 0005

		RT W	ENDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=======================================	======	5====	*====	=======	=======	=====
Aroclor-1016-1	8.28	8.18	8.38	240.9	250.0	-3.6
Aroclor-1016-2	8.76	8.67	8.87	241.0	250.0	-3.6
Aroclor-1016-3	9.06	8.97	9.17	246.7	250.0	-1.3
Aroclor-1016-4	9.85	9.75	9.95	241.8	250.0	-3.3
	•	•		•	'	•

AROCLOR AVG: 242.6 CAL %D = -3.0

Date Analyzed: 10/01/15

Lab Standard ID: AR1660

Time Analyzed: 0005

	RT W	INDOW	CALC	NOM	
RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
=====	=====	=====	======	======	=====
12.40	12.30	12.50	230.6	250.0	-7.8
13.08	12.98	13.18	239.1	250.0	-4.4
13.45	] 13.35	13.55	238.2	250.0	-4.7
13.55	13.45	13.65	234.6	250.0	-6.2
13.96	13.86	14.06	231.7	250.0	-7.3
	12.40 13.08 13.45 13.55	RT FROM  ====== 12.40 12.30 13.08 12.98 13.45 13.35 13.55 13.45	RT FROM TO  ====== ============================	RT FROM TO AMOUNT (ng)  12.40 12.30 12.50 230.6 13.08 12.98 13.18 239.1 13.45 13.35 13.55 238.2 13.55 13.45 13.65 234.6	RT FROM TO AMOUNT (ng) (ng) ====== 12.40 12.30 12.50 230.6 250.0 13.08 12.98 13.18 239.1 250.0 13.45 13.35 13.55 238.2 250.0 13.55 13.45 13.65 234.6 250.0

AROCLOR AVG: 234.8 CAL %D = -6.1

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed :10/01/15

Lab Standard ID: AR1248

Time Analyzed:0359

9.30	9.50	=======	======	=====
9.30	0 50	0 0		
	, ,,,,,	251.0	250.0	0.4
9.75	9.95	250.1	250.0	0.0
10.20	10.40	250.7	250.0	0.3
10.44	10.64	250.9		0.3
	10.20	10.20 10.40	10.20 10.40 250.7	10.20 10.40 250.7 250.0

AROCLOR AVG: 250.7 CAL %D = 0.3

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB5

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed :10/01/15

Lab Standard ID: AR1660

Time Analyzed: 0421

	RT W	INDOW	CALC	NOM	
RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
======	=====	=====		=======	====
8.28	8.18	8.38	241.0	250.0	-3.6
8.76	8.67	8.87	241.2	250.0	-3.5
9.06	8.97	9.17	247.0	250.0	-1.2
9.85	9.75	9.95	242.8	250.0	-2.9
	8.28 8.76 9.06	RT FROM  ===== 8.28 8.18 8.76 8.67 9.06 8.97	8.28 8.18 8.38 8.76 8.67 8.87 9.06 8.97 9.17	RT FROM TO AMOUNT (ng)  ====== 8.28 8.18 8.38 241.0 8.76 8.67 8.87 241.2 9.06 8.97 9.17 247.0	RT FROM TO AMOUNT (ng)  ====== 8.28 8.18 8.38 241.0 250.0 8.76 8.67 8.87 241.2 250.0 9.06 8.97 9.17 247.0 250.0

AROCLOR AVG: 243.0 CAL %D = -2.8

Date Analyzed: 10/01/15

Lab Standard ID: AR1660 Time

Time Analyzed :0421

I	RT W	NDOW	CALC	NOM	
RT	FROM	TO	AMOUNT	AMOUNT	&D
l			(ng)	(ng)	
=====	=====	=====	=======	=======	====
12.40	12.30	12.50	233.1	250.0	-6.8
13.08	12.98	13.18	240.2	250.0	-3.9
13.45	13.35	13.55	238.0	250.0	-4.8
13.55	13.45	13.65	234.6	250.0	-6.1
13.96	13.86	14.06	231.9	250.0	-7.2
	12.40 13.08 13.45 13.55	RT FROM  ====== 12.40 12.30 13.08 12.98 13.45 13.35 13.55 13.45	RT FROM TO  ====== ============================	RT FROM TO AMOUNT (ng)  ====== 12.40 12.30 12.50 233.1 13.08 12.98 13.18 240.2 13.45 13.35 13.55 238.0 13.55 13.45 13.65 234.6	RT FROM TO AMOUNT (ng) ======= 12.40 12.30 12.50 233.1 250.0 13.08 12.98 13.18 240.2 250.0 13.45 13.35 13.55 238.0 250.0 13.55 13.45 13.65 234.6 250.0

AROCLOR AVG: 235.6 CAL %D = -5.8

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed:09/30/15

Lab Standard ID: AR1254

Time Analyzed :2344

		RT W	INDOW	CALC	NOM		
COMPOUND/PEAK NO.	RT	T FROM TO		AMOUNT (ng)	AMOUNT (ng)	%D	
	=====	=====	=====		======	=====	
Aroclor-1254-1	11.22	11.12	11.32	250.5	250.0	0.2	
Aroclor-1254-2	11.31	11.22	11.42	249.8	250.0	-0.1	
Aroclor-1254-3	11.75	11.66	11.86	251.1	250.0	0.4	
Aroclor-1254-4	11.90	11.81	12.01	250.7	250.0	0.3	
Aroclor-1254-5	12.68	12.59	12.79	252.4	250.0	1.0	

AROCLOR AVG: 250.9 CAL D = 0.4

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5 Project: JFOS3

GC Column: ZB35 Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1660 Time Analyzed: 0005

	1		CALC	MOM	
RT	FROM	ТО	AMOUNT (ng)	AMOUNT (ng)	%D
*=====	=====		SEE:5555	=======	====
8.78	8.68	8.88	232.2	250.0	-7.1
9.48	9.39	9.59	234.0	250.0	-6.4
9.90	9.81	10.01	237.6	250.0	-4.9
10.44	10.35	10.55	236.6	250.0	-5.4
	9.48 9.90	RT FROM  ===== 8.78 8.68 9.48 9.39 9.90 9.81	RT FROM TO  8.78 8.68 8.88  9.48 9.39 9.59  9.90 9.81 10.01	RT FROM TO AMOUNT (ng)  8.78 8.68 8.88 232.2  9.48 9.39 9.59 234.0  9.90 9.81 10.01 237.6	RT FROM TO AMOUNT (ng)  8.78 8.68 8.88 232.2 250.0  9.48 9.39 9.59 234.0 250.0  9.90 9.81 10.01 237.6 250.0

AROCLOR AVG: 235.1 CAL %D = -6.0

Date Analyzed :10/01/15

Lab Standard ID: AR1660 Time Analyzed: 0005

		RT W	INDOW	CALC	MOM		
COMPOUND/PEAK NO.	RT	FROM	то	AMOUNT (ng)	AMOUNT (ng)	%D	
	=====	=====	=====	======	=======	=====	
Aroclor-1260-1	12.91	12.81	13.01	223.4	250.0	-10.6	
Aroclor-1260-2	13.66	13.56	13.76	236.3	250.0	-5.5	
Aroclor-1260-3	14.09	13.99	14.19	231.1	250.0	-7.6	
Aroclor-1260-4	14.14	14.05	14.25	238.1	250.0	-4.8	
<del></del>		-		•	•		

AROCLOR AVG: 232.2 CAL D = -7.1

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed: 10/01/15

Lab Standard ID: AR1248

Time Analyzed: 0359

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	TRUOMA	AMOUNT	%D
			,	(ng)	(ng)	
	=====	=====	=====	=======	=======	====
Aroclor-1248-1	9.47	9.38	9.58	251.5	250.0	0.6
Aroclor-1248-2	10.44	10.35	10.55	249.7	250.0	-0.1
Aroclor-1248-3	10.98	10.89	11.09	250.4	250.0	0.1
Aroclor-1248-4	11.34	11.25	11.45	249.5	250.0	-0.2
		•	•	•	•	

AROCLOR AVG: 250.3 CAL %D = 0.1

FORM VII PCB

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB35

Intrument: ECD7

Init. Calib. Date: 09/30/15

Date Analyzed :10/01/15

Lab Standard ID: AR1660

Time Analyzed: 0421

		RT W	INDOW	CALC	NOM	
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D
	_ =====	=====	=====	=======	======	=====
Aroclor-1016-1	8.78	8.68	8.88	232.4	250.0	-7.0
Aroclor-1016-2	9.48	9.39	9.59	234.6	250.0	-6.2
Aroclor-1016-3	9.90	9.81	10.01	238.6	250.0	-4.6
Aroclor-1016-4	10.44	10.35	10.55	233.9	250.0	-6.4

AROCLOR AVG: 234.9 CAL %D = -6.0

Date Analyzed: 10/01/15

Lab Standard ID: AR1660 Time Analyzed: 0421

		RT WINDOW		CALC	NOM		
COMPOUND/PEAK NO.	RT	FROM	TO	AMOUNT (ng)	AMOUNT (ng)	%D	
=======================================	======	=====	=====	=======	======	=====	
Aroclor-1260-1	12.91	12.81	13.01	219.0	250.0	-12.4	
Aroclor-1260-2	13.66	13.56	13.76	232.5	250.0	-7.0	
Aroclor-1260-3	14.09	13.99	14.19	227.0	250.0	-9.2	
Aroclor-1260-4	14.14	14.05	14.25	233.5	250.0	-6.6	

AROCLOR AVG: 228.0 CAL %D = -8.8

FORM VII PCB

#### FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC

Client: JORGENSEN FORGE

ARI Job No.: ANA5

Project: JFOS3

GC Column: ZB5

ID: 0.53 (mm)

Instrument ID: ECD7

Init. Calib. Date: 09/30/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

				<del></del>						
						IS1		IS2		
			1			AREA	RT	AREA	RT	
			===			==== <b>=</b> =	======	========	======	
			ו	CAL	MIDPT	8066556	3.285	5454994	15.095	
			U	PBR	LIMIT	16133112	3.385	10909988	15.195	
			IK	WER	LIMIT	4033278	3.185	2727497	14.995	
			I			li		:		
	CLIENT	LAB	DATI	<u> </u>		IS1		IS2		
Ì	SAMPLE NO.	SAMPLE ID	ANALYZ	KED	TIME	AREA	RT	AREA	RT	
İ			*****						======	
01	ZZZZZ	ZZZZZ	09/30/	/15	1639	8156160	3.285	5568951	15.096	
02		0.25PPMAR166	09/30/	/15	1700	8066556	3.285	5454994	15.095	
03		0.02PPMAR166	09/30/	15	1721	8091336	3.284	5600526	15.095	
04	,	0.05PPMAR166	09/30/		1742	7913459	3.284	5577369	15.095	
05		1PPMAR1660	09/30/	15	1804	7875770	3.284	5564302	15.095	
06		0.1PPMAR1660	09/30/		1825	8219827	3.283	5857219	15.095	
07	]	0.5PPMAR1660	09/30/		1846	8005014	3.282	5619457	15.095	
08		AR1242	09/30/		1908	8062646	3.284	5758938	15.095	
09		AR1248	09/30/		1929	8072160	3.285	5743651	15.095	
10		AR1254	09/30/	/15	1950	8169016	3.284	5868403	15.095	
11		AR2162	09/30/	/15	2012	8215009	3.282	5905238	15.094	
12	!	AR3268	09/30/		2033	8262439	3,282	5888824	15.094	
13	ZZZZZ	ZZZZZ	09/30/		2054	7975276	3.281	5736817	15.094	
14	ZZZZZ	ZZZZZ	09/30/		2115	8130853	3.278	5928831	15.094	
15	ZZZZZ	ZZZZZ	09/30/		2137	7961470	3.279	5833507	15.094	
	ZZZZZ	ZZZZZ	09/30/		2158	8188078	3.281	5977419	15.094	
17	ZZZZZ	ZZZZZ	09/30/	,	2219	7988538	3.280	5855523	15.094	
,	ZZZZZ	ZZZZZ	09/30/		2240	8082296	3.280	5892233	15.094	
19		AR1254	09/30/		2344	8213042	3.280	5942812	15.094	
20		AR1660	10/01/	15	0005	8273029	3.279	6050806	15.094	
21	ANA5MBW1	ANA5MBW1	10/01/	15	0131	8494341	3.278	5287992	15.094	
22	ANA5LCSW1	ANA5LCSW1	10/01/	15	0152	8472338	3.280	5588755	15.094	
23	ANA5LCSDW1	ANA5LCSDW1	10/01/		0213	8610838	3.279	5809091	15.094	
24	CMP24-B10+05	ANA5A	10/01/	15 j	0234	8810360	3.278	6088583	15.094	
25		AR1248	10/01/	15	0359	8285443	3.279	6050695	15.094	
26		AR1660	10/01/	15	0421	8369053	3.279	6077631	15.094	
į				i		i i		İ		

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

^{*} Indicates value outside QC Limits

## FORM 8 PCB INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: JORGENSEN FORGE

ARI Job No.: ANA5 Project: JFOS3

GC Column: ZB35 ID: 0.53 (mm) Instrument ID: ECD7

Init. Calib. Date: 09/30/15

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

						IS1		IS2	
						AREA	RT	AREA	RT
				TON	MTDDD	======================================	4 200	C5100C1	
					MIDPT	13586362	4.397	6512961	15.906
				,	LIMIT	27172724	4.497	13025922	16.006
				DOMRK	LIMIT	6793181	4.297	3256480	15.806
	CLIENT	LAB	I	DATE	{	TS1		IS2	
	SAMPLE NO.	SAMPLE ID	AN	LYZED	TIME	AREA	RT	AREA	RT
	=========		====	=====	=====	=======		=======	======
01	ZZZZZ	ZZZZZ	09,	/30/15	1639	13723894	4.396	6632024	15.907
02		0.25PPMAR166	, .	/30/15	1700	13586362	4.397	6512961	15.906
03		0.02PPMAR166		/30/15	1721	13532075	4.395	6625253	15.907
04		0.05PPMAR166	09,	/30/15	1742	13332298	4.396	6594047	15.906
05		1PPMAR1660	09,	30/15	1804	13337715	4.397	6622148	15.906
06		0.1PPMAR1660	09,	30/15	1825	13929861	4.395	6974857	15.907
07		0.5PPMAR1660	09,	30/15	1846	13624637	4.395	6729270	15.907
80		AR1242	09,	30/15	1908	13648234	4.396	6860812	15.906
09		AR1248	09,	30/15	1929	13676949	4.397	6835392	15.907
10		AR1254	09,	30/15	1950	13737253	4.395	6972452	15.906
11		AR2162	09,	30/15	2012	13635771	4.395	6981224	15.906
12		AR3268	09,	30/15	2033	13710660	4.394	6956825	15.906
13	ZZZZZ	ZZZZZ	09,	/30/15	2054	13350323	4.394	6821654	15.905
L4	ZZZZZ	ZZZZZ	09,	30/15	2115	13598897	4.391	6969140	15.906
L5	ZZZZZ	ZZZZZ	09,	30/15	2137	13344503	4.392	6865704	15.906
16	ZZZZZ	22222	09,	30/15	2158	13682152	4.392	7087472	15.905
17	ZZZZZ	ZZZZZ	09,	30/15	2219	13312259	4.392	6942012	15.905
18	ZZZZZ	ZZZZZ	09,	30/15	2240	13480625	4.393	7000012	15.905
19		AR1254	09,	30/15	2344	13695493	4.392	7031986	15.906
20		AR1660	10,	01/15	0005	13883889	4.392	7177767	15.906
21	ANA5MBW1	ANA5MBW1	10,	01/15	0131	14070776	4.390	6747544	15.905
22	ANA5LCSW1	ANA5LCSW1	10,	01/15	0152	14042885	4.392	6882519	15.905
23	ANA5LCSDW1	ANA5LCSDW1	10,	01/15	0213	14294753	4.391	7097433	15.905
24	CMP24-B10+05			01/15	0234	14639442	4.390	7375648	15.905
25		AR1248	, ,	/01/15	0359	13926088	4.390	7290537	15.905
26		AR1660		01/15	0421	14069800	4.391	7343472	15.905
	i		j	•	İ	j		İ	}

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- 0.1 min

IS2 = Hexabromobiphenyl

FORM VIII PCB

ANA5:00028

page 1 of 1 FORM V

^{*} Indicates value outside QC Limits

# ATTACHMENT C DATA VALIDATION REPORT

### **Data Validation Report**

# Jorgensen Forge Outfall Site, Third Modification Unshored Excavation Areas Seattle, Washington

Laboratory Project Numbers:
AML7, AMN4, AMO6, AMV1, AMW0, ANA4, ANA5

Prepared for:

SoundEarth Strategies, Inc.

2811 Fairview Ave East, Suite 2000 Seattle, Washington 98102

Prepared by:

Pyron Environmental, Inc.

3530 32nd Way, NW Olympia, WA 98502

Approved By: Date: 11/4/2015

Mingta Lin, Senior Project Chemist

#### **ACRONYMS**

% percent

**%D** percent difference

 $%D_f$  percent drift

%R percent recovery

**%RSD** percent relative standard deviation

ARI Analytical Resources, Inc.

**CCV** continuing calibration verification

**CF** calibration factor

**CLP** U.S. EPA Contract Laboratory Program

coc chain-of-custody

**ECD** electron capture detector

**EPA** U.S. Environmental Protection Agency

ICAL initial calibration

ICV initial calibration verification

LCS laboratory control sample

LCSD laboratory control sample duplicate

MDL method detection limit mg/kg milligram per kilogram

MS matrix spike

MSD matrix spike duplicate

NFGs CLP National Functional Guidelines for Data Review (EPA 2014)

**PCBs** polychlorinated biphenyls

QA/QC quality assurance/quality control QAPP quality assurance project plan

**RF** response factor

**RL** reporting limit

**RPD** relative percent difference

**SDG** sample delivery group

#### **INTRODUCTION**

This report presents and discusses findings of the data validation performed on analytical data for soil and water samples collected during September 2015 for the referenced project. The laboratory reports validated herein were submitted by Analytical Resources, Inc. (ARI)in Tukwila, Washington.

A Stage 2B (as defined in EPA 2009) data validation was performed on these laboratory reports. The validation followed the procedures specified in USEPA CLP Functional Guidelines ([NFGs], EPA 2014), with modifications to accommodate project and analytical method requirements. The numerical quality assurance/quality control (QA/QC) criteria applied to the validation were in accordance with those specified in the sampling and analysis plan([SAP], SoundEarth Strategies 2015) and the current performance-based control limits established by the laboratory (laboratory control limits). Instrument calibration, frequency of QC analyses, and analytical sequence requirements were evaluated against the analytical method.

Validation findings are discussed in each section pertinent to the QC parameter for each type of analysis. Qualified data with applied data qualifiers are summarized in the **Summary** section at the end of this report. Samples and the associated analyses validated herein are summarized as follows:

				Analysis
Field Sample ID	Laboratory Sample ID	Sampling Date	Sample Type	PCBs
266-N12-1+13	15-16293-AML7A	09/15/15	Soil	Х
266-S14-1+13	15-16294-AML7B	09/15/15	Soil	Х
266-W13-1+11	15-16295-AML7C	09/15/15	Soil	Х
266-E15-1+11	15-16296-AML7D	09/15/15	Soil	Х
266-B11-1+9	15-16297-AML7E	09/15/15	Soil	Х
CMP12-B08-1+06	15-16384-AMN4A	09/15/15	Soil	Х
CMP24-B09-1+05	15-16385-AMN4B	09/15/15	Soil	Х
CMP12-B08-1+06	15-16384-AMN4A	09/15/15	Soil	Х
CMP24-B09-1+05	15-16385-AMN4B	09/15/15	Soil	Х
CMP12-B07-1+06	15-16466-AMO6A	09/16/15	Soil	Х
CMP24-B10-1+05	15-16467-AMO6B	09/16/15	Soil	X
266-B11-2+06	15-16831-AMV1A	09/21/15	Soil	Х
266-S14-2+07	15-16832-AMV1B	09/21/15	Soil	Х
266-W13-2+07	15-16833-AMV1C	09/21/15	Soil	Х
266-N12-2+07	15-16834-AMV1D	09/21/15	Soil	Х
266-E15-2+07	15-16835-AMV1E	09/21/15	Soil	Х

				Analysis
Field Sample ID	Laboratory Sample ID	Sampling Date	Sample Type	PCBs
JFOS3-PC09+15	15-16893-AMW0A	09/21/15	Soil	X
JFOS3-PC10+15	15-16894-AMW0B	09/21/15	Soil	x
JFOS3-PC11+15	15-17007-ANA4A	09/23/15	Soil	X
CMP24-B10+05R	15-17008-ANA5A	09/23/15	Water	X

#### Notes:

PCBs – Polychlorinated biphenyls

X – The analysis was requested and performed on the sample.

The analytical parameters requested for the samples, the respective analytical methods, and the analytical laboratories are summarized below:

Parameter	Analytical Method	Analytical Laboratory
PCB Aroclors	SW846 Method 8082A	Analytical Resources, Inc. Tukwila, Washington

**Note:**SW846 - *USEPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,* SW-846, Third Edition, December 1996.

#### DATA VALIDATION FINDINGS

#### 1. PCB Aroclors (EPA Method SW8082A)

#### 1.1 Sample Management and Holding Times

All samples were hand-delivered to the laboratory immediately after collection, and stored at the laboratory properly. No anomalies were identified in relation to sample preservation, handling, and transport.

Soil samples should be extracted within 14 days and water samples within seven days of collection. Sample extracts should be analyzed within 40 days of extraction. All samples were extracted and analyzed within the required holding times.

#### 1.2 Initial Calibration

The method requires that (1) a minimum of 5-point calibration be performed using the mixture of Aroclor 1016 and 1260, (2) a single-point calibration be performed for the other five Aroclors to establish calibration factors (CFs) and for Aroclor pattern recognition, (3) at least 3 peaks (preferably 5 peaks) must be chosen for each Aroclor for characterization, (4) the %RSD values of Aroclor 1016 and 1260 CFs must be ≤20%, and (5) if dual column analysis is chosen, both columns should meet the requirements. All ICALs met the requirements.

#### 1.3 Calibration Verification

The method requires that (1) the initial calibration be verified prior to any analysis for each 12-hour analysis sequence, and (2) the %D value be within ±20% for the Aroclor. The continuing calibration verification met the method criterion.

#### 1.4 Method Blanks

Method blanks were prepared and analyzed as required. PCB Aroclors were not detected at or above the reporting limits (RLs) in the method blanks.

#### 1.5 Surrogate Spikes

Surrogate spikes were added to all samples as required by the method. All surrogate spike %R values were within the laboratory control limits.

#### 1.6 Matrix Spike and Matrix Spike Duplicate (MS/MSD)

MS/MSD analyses were performed on a project sample as required. The percent recovery (%) and relative percent difference (RPD)values were within the laboratory control limits.

#### 1.7 Laboratory Control Sample (LCS) and LCS Duplicate (LCSD)

LCS and LCSD analyses were performed as required by the method. All %R and RPD values were within the project control limits.

#### 1.8 Method Reporting Limits

Sample-specific RLs were supported with adequate initial calibration concentrations. Chemical interference was present in selected samples such that reporting limits for one or multiple Aroclors in these samples were elevated from standard RLs. However, all sample-specific RLs met the project quantitation limit goal of 0.33 mg/kg.

#### 1.9 Field Duplicates

Field duplicates were not required for PCB Aroclors analyses in this sampling event.

#### 1.10 Overall Assessment of PCB Aroclors Data Usability

PCB Aroclor data are of known quality and acceptable for use.

### **SUMMARY**

**Table I. Data Affected by QC Anomalies** 

Laboratory ID	Sample ID	Analyte	Qualifier	Qualified Reason	Report Section				
No data qualifiers were assigned in relation to QC anomalies in these SDGs.									

#### **REFERENCES**

- USEPA 2014. Contract Laboratory Program National Functional Guidelines for Organic Superfund Data Review.Office of Superfund Remediation and Technical Innovation. August 2014. EPA 540-R-014-002.
- USEPA 2009. Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use, January 13 2009. EPA 540-R-08-005.
- USEPA 1998. Test Methods for Evaluating Solid Waste (SW-846). Third Edition and Revised Update IIIA. Office of Solid Waste and Emergency Response, Washington, D.C. April 1998.
- USEPA Region 10 2015. Jorgensen Forge Outfall Site, Sampling and Analysis Plan/Quality Assurance Project Plan, Third Modification for the Administrative Order on Consent for Removal Action. SoundEarth Strategies, Inc., September 2015.

# ATTACHMENT D DISPOSAL RECEIPTS



215119

Reprint Ticket# 109561

33.41

Ph: 206 763 5025

******	International Contraction of					
	omer Name JORGENSEN F	FORGE CORPORATIO				
LICK	et Date 09/15/2015		Vehicle#	C43	Volume	
Pay∎	ent Type Credit Acco	ount	Container			
Manu	al Ticket#		Driver	RALPH PLATA		
Rout	e AK		Check#	,		
Haul	ing Ticket#		Billing#	0000331		
Dest	ination		<b>Grid</b>			
P0#	1193210R					
	Time	Scale	Operator	Inbound	Gross	106700 15
In	09/15/2015 09:58:04	SCALE i	lmercer		Tare	39880 lb*
Dut	09/15/2015 10:06:36	SCALE 1	learcer		Net	66820 lb

Comments CLEARCREEK-KF

Product		LD%	Qty	МОЛ	Rate	Тах	Amount	Origin
1 2 3	Daily Cover-PCS-Tons-Pet FEA-FUEL, ENV, ADMIN GONDOLA T/10T MIN-GONDOL	100 100 100	33. 41 33. 41 33. 41	Tons Tons Tons				KING

* Manual Weight

Total Tax Total Ticket

Tons



Reprint Ticket# 109578

104240 15

3988Ø 1b

64360 16

32.18

Ph: 206 763 5025

Customer Name JORGENSEN FORGE CORPORATION J Carrier SELF HAULER * Volume Vehicle# C43 09/15/2015 Ticket Date Container Payment Type Credit Account RALPH PLATA Driver Manual Ticket# Check# Route AK Billing# 0000331 Hauling Ticket# Grid Destination 119321DR PO#

Time Scale Operator Inbound Gross
In 09/15/2015 12:18:55 SCALE 1 Imercer Net
Out 09/15/2015 12:18:55 Tons

Condents CLEARCREEK-KF

Prec	iuct	LDX	Qty	MDU	Rate	Tax	Amount	Origin
1 2 3	Daily Cover-PCS-Tons-Pet FEA-FUEL, ENV, ADMIN GONDOLA T/10T MIN-GONDOL	100	32.18 32.18 32.18	Tons				KIŃG

Total Tax Total Ticket



Reprint Ticket# 109587

Ph: 206 763 5025

WARTE MANAGEMENT, Customer Name JORGENSEN FORGE CORPORATION Ticket Date 09/15/2015	J Carrier   Vehicle#   Container		Λοισαε	
Payment Type Credit Account	Driver	RALPH PLATA		
Manual Ticket# Route AK Hauling Ticket#	Check# Billing# Grid	Ø <b>@</b> ØØ331		
Destination PO# 1193210R Time Scale In 09/15/2015 14:06:52 SCALE 1 Out 09/15/2015 14:06:52	Operator luercer luercer	Inbound	Gross Tare Net Tons	86320 lb 39880 lb 46440 lb 23.22

Comments CLEARCREEK-KF

Product	LD%	Qty	UQM	Rate	Tax	Apount	Origin KING
1 Daily Cover-PCS-Tons-Pet 2 FEA-FUEL, ENV, ADMIN 3 GONDOLA T/10T MIN-GONDOL	100	23. 22 23. 22 23. 22	Tons				RING

Total Tax Total Ticket



215119

Reprint Ticket# 109598

Ph: 206 763 5025

Customer Name JORGENSEN FORGE CORPORATION J Carrier SELF HAULER *

Ticket Date 09/15/2015

Vehicle# C43

Volume

Payment Type Credit Account

Container

Manual Ticket#

Driver

Route

Check#

RALPH PLATA

Hauling Ticket# Destination

Billing# 0000331

Grid

P0# 1193210R Time

Scale Operator SCALE 1

Inbound

97100 15

09/16/2015 08:13:35 In

lmarcer

Gross Tare

39880 16 57220 15

Out 09/16/2015 08:13:35

laercer

Net Tons

28.61

Comments CLEAR CREEK - LM (MNFST# 201500)

Product	LD%	Qty	MOL	Rate	Tax	Amount	Origin
1 Daily Cover-PCS-Tons-Pet 2 FEA-FUEL, ENV, ADMIN 3 GONDOLA T/101 MIN-GONDOL	100 100	28. 51	Tons Tons				KING KING KING

Total Tax Total Ticket



215119

Reprint

Ticket# 109609

ph: 206 763 5025

WASTE MANAGEMENT Customer Name JORGENSEN FORGE CORPORATION Ticket Date 09/16/2015	Vehicle#		Volume	
Payment Type Credit Account	Container Driver	RALPH PLATA		
Manual Ticket# Route AK Hauling Ticket#	Check# Billing# Grid	<b>@@@@331</b>		
Destination PO# 1193210R Time Scale In 09/16/2015 09:47:08 5CALE 1 Out 09/16/2015 09:47:08	Operator Leercer Leercer	Inbound	Gross Tare Net Tons	104600 lb 39880 lb 64720 lb 32,36

Comments CLEARCREEK-KF

	LD≭	Qty	UOM	Rate	Tax	Amount	Origin
Product						<u> </u>	KING
Pre_Tons=Det	100	32, 36	Tons				KING
1 Daily Cover-PCS-Tons-Pet	100	32.36	Tons				KING
2 FEA-FUEL, ENV, ADMIN		32, 36	Tons				
3 BONDOLA T/18T MIN-GONDOL	4 70						

Total Tax Total Ticket



215119

Reprint

Ticket# 109618

Ph: 206 763 5025

Customer Name JORGENSEN FORGE Ticket Date 09/16/2015 Payment Type Credit Account Manual Ticket# Route AK Hauling Ticket# Destination		J Carrier Vehicle# Container Driver Check# Billing# Grid		Volume	
1170	Q11C = -	Operator Imercer Imercer	Inbound	Grass Tare Net Tons	81080 15 39880 15 41200 15 20.60

Comments CLEARCREEK-KF

Praduct	LD%	ūty	MOLI	Rate	Tax	Amount	Origin
bi prizes							
1 Daily Cover-PCS-Tons-Pet 2 FEA-FUEL, ENV, ADMIN 3 GONDOLA T/10T MIN-GONDOL	300	20.60 20.60 20.60	Tons Tons Tons				KING KING KING

Total Tax Total Ticket

Plea		ned for use on elite (12-pitch) typewriter.)		<u> </u>	For	n Approved. ÓMB No. 2050-0039;
1	WASTE MANIFEST	1. Generator ID Munifer	2. Page 1 of	3. Emergency Response Phone	4. Marylos Trackles b	34602 CTN
	5. Cenerators Name and Magn	g Address		Generator's Site Address (If different	than meding address)	
11	Berl V. Alaghai	f PAST N				
11.	YELFOT KA	r <del>g</del> o s skila	par his both			
H	Generator's Phonec	1 92 1 1 64 3	1			
Ш	B. Transporter 1 Company Nam	e			U.S. EFA KO Number	
	7. Transporter 2 Company Nam	NA CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTO	••••		U.S. EPA ID Number	
$\ \cdot\ $					1	
H	8. Designated Facility Name an	d Sile Address			U.S. EPA ID Number	
H	23400 LEECUS # 500				23.0	Seene d
H	GRALIE VILLEY			370 (N) (A	1.1.4	्च ेहा पर इच्चे
Ш	・全色体 Facility's Phone:	75 a - 15 f d d			1	
Ш	ga. 9b. U.S. OOT Description	on (including Proper Shipping Name, Hazard Cli	ass, ID Number,	10. Containers	11. Total 12. Unit	
Ш	HM and Packing Group (if a	iny))		No. Typa	Quantity Wil/Wol.	13. Waste Codes
	1.	CANCELLA CONTRACTOR TO SERVICE CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CO	*****	<u> </u>	*	
5	x l				5474	
3	V`					
GENERATOR	2.		······································		1 1 1 1 1 1 1	
2						
Ш						
Ш	3.				-	
Ш						
Ш	4.					
Ш						
	i I					
11	14. Special Handling Instruction	s and Additional Information			· · · · · · · · · · · · · · · · · · ·	· · · · · ·
П						
Н	ि 🗗 🤼 ५५५					
1)						
}	marked and labeled/placa	NR'S CERTIFICATION: I hereby declar that the rded, and are in all respects in proper condition contents of this consignment conform to the ten	for transport according to applic	able international and national gover		
11	I certify that the waste min	ilmization statement identified in 40 CFR 262.27	(a) (a) I amb a see to quantity gene	rator) or (b) (if I am a smell quentity (	generator) is true.	
П	Generalor's/Offeror's Printed/Ty	ped Name	Sign	Aprie emp		Morith Day Year
↓			ŀ			
딛	16. International Shipments	Import to U.S.	Export from L	).S. Port of entry/soit:		
Ē	Transporter signature (for expo			Date leaving U.S.:		
띪	17. Transporter Adionovilledgmen					
ANSPORTER	Transporter   Printed Typed Na		Şigr	agiture ,		Month Day Year
ğ	1201	Y 22 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4		<u> </u>	. معمر مراب بالمعادد بالمراب بالمعادد بالمراب بالمراب بالمراب بالمراب بالمراب بالمراب بالمراب بالمراب	F1 2X 15
Ä	Transporter 2 Printed/Typed Na	me	Şigi	nature .	<u> </u>	Month Day Year
E					<u> </u>	
1	1B. Discrepancy					
11	12a. Discrepancy Indication Sp	ace Outertity	Туюе	Rasidue	Partial Rejection	Full Rejection
П			— 1/			
Н				Manifest Reference Number:		
	18b. Alternate Facility (or Gene	rator)			U.S. EPA ID Number	
등						
	Facility's Phone:					
빌	18c. Signature of Alternate Fac	lity (or Generator)	•			Month Day Year
۱ž				· · · · · · · · · · · · · · · · · · ·		
DESIGNATED FACILITY	19. Hazardous Waste Report M	lanagement Method Codes (i.e., codes for haza	rdous waste treatment, disposal	, and recycling systems)		
18	1.	]2.	3.		4.	
$ \cdot $					<u>·</u>	
]]		or Operator: Certification of receipt of hazardous				
	Printed/Typed Name		. Sig	nakure		Month Day Year
11	1		I			1 'I I

1,100		print or type. (Form desig	de no eau 101 ben	4e (12-pilch) typewrite	<del>)</del> r.)			1			Fam	Approved.	CMB No. 3	2050-0039
1	UP	NIFORM HAZARDOUS	1. Generator ID Nu	ımber		2. Page 1 of	3. Emergency Res	ponse Phone	<del>}</del>	4. Manufest	ireching Nu	mber	4 -	
11	l '	WASTE MANIFEST	   4666000			1	y ^a (∷i, `ua uni	17.	<b>3</b> % s	(  \ <b>J</b> U	เบบ3	46L	IT C	TN
11	5.0	Generator's Mame and Melin	g Address				Generator's Site Ad	dress, lif differ	roet tha	in mailing address	·*)		<del>/ _</del>	
Ш	1	<b>被称约数</b> 1970年2月								-		تنمر		
П	1	REAL OF MARKETINE	ह अभग्र									·		
Ш		<b>电源图</b> [2]			n7 .8%	das j								
H	Çe	merator's Phone: ? ? > > Transporter 1 Company News	1 102 4 101 <u>1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 </u>							U.S. EPA ID N	h			
Ш	]	The section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the section of the se	•							U.S. EM IU N	ATHERE.			
Ш	ببإ	T											. ,	· ·
П	\'`'	Trensporter 2 Company Nami	ŧ							U.S. EPA ID N	Antupes.			
Ш	L									1				
Ш		Designated Facility Name and	•							U.S. EPA ID N	<b>Vurnber</b>	_		
П		to in reposition the	• •											
11	4	Triange Transport	À.								3,7039	95:31	4 S	
Ш		चरुकार २४०५ alliys Phone: अञ्चलक	21 4 444		•		:	e seeta	•		•		-	
<b>                                     </b>	Ra.	01-410-8000		Shipping Name, Hazard	Class, ID Number.		10.4	Conternera		11. Total	12. Unii			* * ***
Ш	HM						No.		pe	Cluarity	WLVOL	13.1	Waste Code	9
	┢	1. (24) 27 (92)	Control Public Street of	Beligio etce in content of	9771.3. 6	Mari	1	<del></del>	<del></del>	•				
뜅	l _x	4	10, 41:47:	The street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of the street of th	en. 31. 9	500 V		•	ረክ	6222	۲ [			
3	ľŽ	<b>'</b>							- }	Marie Co.				
節	F	2.				•	<del></del>		-					
GENERATOR		-							- 1				j	
Ĭĭ									- 1					
11	L								_		ļ			
Ш		g.		•									1	
	•					<b>*</b>					-			
	<u> </u>				127.						1			
Hi		4.		146										
Ħ	1		•	*				ŀ			<b>!</b> +			
Н	1	1		*				ŀ			i			!
Ш	14	. Special Hendling instruction	41.110 11.4				l	ſ						
			6 BMOI ACCIDIONAL IONS	armétion										
11	ŀ	##T## 19074		orm <b>étio</b> n			l	<u> </u>						
	\  -			ormétion !			I	<u> </u>	•		1 .			
	) ·	##T## 19074		erm <b>e</b> tion		<u> </u>		ı						
		PT 2.415		<u>'</u>	the contants of this	consignment	sie fully and accura	ely described	albove	by the proper shi	iobino rama.	and are cla	sified, pack	aqed.
		PT 2.41 S  GENERATOR SOFFERO marked and isbelediplacer	R'S CERTIFICATIO ded, and are in all re	IN: Thereby declare that expects in proper condition	on for transport acco	arding to applic	able international a	og lanotar br	albowe	by the proper shi ental regulations.	ipping nama, If suport ship	end are class	sified, packs	adeq'
		GENERATOR'S/OFFERO marked and labeled/placar Exporter, I certify that the c	R'S CERTEICATIO ded, and are in all n contents of this cons	Nt: Thereby declare that expects in proper conditi ignment conform to the to	on for transport accor arms of the altached	ording to applic d EPA Advoor	able international a ledgment of Consen	nd nadional go t.	MEMINSW	ental regulations.	ipping nama, If export ship	end are class	aified, packs am the Prima	aged,
	15.	GENERATOR'S/OFFERO marked and labeled/placar Exporter, I certify that the veste min	R'S CERTIFICATIO ded, and are in all n contents of this cons mization statement	Nt: Thereby declare that expects in proper conditi ignment conform to the to	on for transport accor arms of the altached	ording to applic d EPA Advoor e quantity gen	able international a ledgment of Consen anator) or (b) (if I am	nd nadional go t.	MEMINSW	ental regulations.	ipping name. If export ship	end are classification of the comment and the comment and the comment and the comment are comment and the comment are comment and the comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comment are comm	an Ge Piana	Bry
	15.	GENERATOR'S/OFFERO marked and labeled/placar Exporter, I certify that the c	R'S CERTIFICATIO ded, and are in all n contents of this cons mization statement	Nt: Thereby declare that expects in proper conditi ignment conform to the to	on for transport accor arms of the altached	ording to applic d EPA Advoor e quantity gen	able international a ledgment of Consen	nd nadional go t.	MEMINSW	ental regulations.	ipping nama, If export ship	merk and t	an Ge Pian	eged, ery Year
	15. Ger	GENERATOR SOFFERO marked and labeled/placar Exporter, I certify that the control of the certify that the waste minimarable sofferor's Printed Types and the certify that the waste minimarable sofferor's Printed Types and the certify that the waste minimarable sofferor's Printed Types and the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certification of the certificati	R'S CERTIFICATIO ded, and are in all re sorkerts of this cons mization stakement ped Name	Nt: Thereby declare that expects in proper conditi ignment conform to the to	on for transport accor arms of the altached	ording to applic d EPA Advoor e quantity gen	able international a ledgment of Consen anator) or (b) (if I am	nd nadional go t.	MEMINSW	ental regulations.	ipping name, If export ship	merk and t	an Ge Piana	Bry
TL	15. Ge	GENERATOR'S/OFFERO marked and labeled/placar Exporter, I certify that the veste min	R'S CERTIFICATIO ded, and are in all re sorkerts of this cons mization stakement ped Name	PM: Thereby declare that espects in proper conditi ignment conform to the is identified in 40 CFR 282.	on for transport scor Arms of the attacher 27(s) (if I am a leng	ording to applic d EPA Advoor e quantity gen	sable international a ledgment of Consen arator) or (b) (if II am natura	nd nadional go t.	wenna Ny gen	ental regulations.	ipping nama. If export ship	merk and t	an Ge Piana	Bry
¥	15. Ger 16.	GENERATOR'S (OFFERO) marked and labeled/places Exporter, I certify that the waste mini- meration's Offeror's Printed/Typ  International Shipments are provided by the components of the components of the components are provided by the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of	R'8 CERTIFICATIO R'8 CERTIFICATIO SORICE SO I filis cons Inization statement ped Name Import I file prily:	No. 1 hereby declare that expects in proper conditi ignment conform to the ti identified in 40 GFR 282.	on for transport scor Arms of the attacher 27(s) (if I am a leng	ording to applic d EPA Advocar e quantity gen Sig	sable international a ledgment of Consen arator) or (b) (if I am natura	nd national go t. e smail quant	tiy gen	ental regulations.	ipping name. If export ship	merk and t	an Ge Piana	Bry
黑	15. Ger 16. Tra	GENERATOR'S/OFFEROMENTED AND A SECOND TO SECOND THE SECOND TO SECOND THE SECOND TO SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECON	R'S CERTIFICATION  R'S CERTIFICATION  condents of this consum  mizertion stakement  ped Marre  Import to  the conty;  of Receipt of Marter	No. 1 hereby declare that expects in proper conditi ignment conform to the ti identified in 40 GFR 282.	on for transport scor Arms of the attacher 27(s) (if I am a leng	ording to applic d EPA Advocar e quantity gen Sig	able international a ledgment of Consen arabu) or (b) (if I am rebure	nd national go t. a smail quant t of entry/exit:	tiy gen	ental regulations.	ipping nama. If export ship	ment and I	em Gre Prime	Year
黑	15. Ger 16. Tra	GENERATOR'S (OFFERO) marked and labeled/places Exporter, I certify that the waste mini- meration's Offeror's Printed/Typ  International Shipments are provided by the components of the components of the components are provided by the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of the components of	R'S CERTIFICATION R'S CERTIFICATION CONTENTS of Itils cons mization statement ped Name Import 1 Its prity; I of Receipt of Marier	PM: Thereby declare that espects in proper conditi ignment conform to the sidentified in 40 GFR 202. to U.S.	on for transport scor Arms of the attacher 27(s) (if I am a leng	ording to applic d EPA Advocar e quantity gen Sig	sable international a ledgment of Consen arator) or (b) (if I am natura	nd national go t. a smail quant t of entry/exit:	tiy gen	ental regulations.	ipping nama. If export ship	merk and t	em Che Prime	Bry
黑	15. Ger 16. Tra	GENERATOR'S/OFFERO marked and fabeled/placar Exporter, I certify that the or I certify that the waste mini- maratim's/Offeror's Printed/Tyr International Shipments are porter signature (for expor- Transporter Actanovied/gment insporter Transporter Actanovied/gment	R'S CERTIFICATION ded, and are in all n contents of this cons mizetion statement ped Name  Import t tis only: of Receipt of Market	No. 1 hereby declare that expects in proper conditi ignment conform to the ti identified in 40 GFR 282.	on for transport scor Arms of the attacher 27(s) (if I am a leng	ording to applic d EPA Advocar e quantity gen Sig	able international a ledgment of Consen arabu) or (b) (if I am rebure	nd national go t. a smail quant t of entry/exit:	tiy gen	ental regulations.	ipping name.	ment and I	th Day	Year
黑	15. Ger 16. Tra	GENERATOR'S/OFFEROMENTED AND A SECOND TO SECOND THE SECOND TO SECOND THE SECOND TO SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECOND THE SECON	R'S CERTIFICATION ded, and are in all n contents of this cons mizetion statement ped Name  Import t tis only: of Receipt of Market	NN: Thereby declare that expects in proper condition to the signment conform to the sidentified in 40 GFR 262.	on for transport scor Arms of the attacher 27(s) (if I am a leng	ording to applic d EPA Actroper e quantity gen Sig  Export from	able international a ledgment of Consen arabu) or (b) (if I am rebure	nd national go t. a smail quant t of entry/exit:	tiy gen	ental regulations.	ipping name.	Mor	th Day	Year
黑	15. Ger 16. Tra	GENERATOR'S/OFFERO marked and fabeled/placar Exporter, I certify that the or I certify that the waste mini- maratim's/Offeror's Printed/Tyr International Shipments are porter signature (for expor- Transporter Actanovied/gment insporter Transporter Actanovied/gment	R'S CERTIFICATION ded, and are in all n contents of this cons mizetion statement ped Name  Import t tis only: of Receipt of Market	PM: Thereby declare that espects in proper conditi ignment conform to the sidentified in 40 GFR 202. to U.S.	on for transport scor Arms of the attacher 27(s) (if I am a leng	ording to applic d EPA Actroper e quantity gen Sig  Export from	cable international a ledgment of Consensation) or (b) (if it am mature.  U.S. Por	nd national go t. a smail quant t of entry/exit:	tiy gen	ental regulations.	ipping name.	Mor	th Day	Year
¥	Tra	GENERATOR'S/OFFEROMENTED AND A SERVICE AND A SEASON OF THE CHIEF WAS THE WAS THE MANAGEMENT OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF T	R'S CERTIFICATION ded, and are in all n contents of this cons mizetion statement ped Name  Import t tis only: of Receipt of Market	NN: Thereby declare that expects in proper condition to the signment conform to the sidentified in 40 GFR 262.	on for transport according to the attacher 27(a) (if I am a larg	ording to applic d EPA Actroper e quantity gen Sig  Export from	cable international a ledgment of Consensation) or (b) (if it am mature.  U.S. Por	nd national go t. a smail quant t of entry/exit:	tiy gen	ental regulations.	ipping name.	Mor	th Day	Year
黑	15. Ger 16. Tra 17. Tra	GENERATOR'S (OFFERO) marked and labeled placer Exporter, I certify that the Learning that the westernin meralian's Offeror's Printed Typ  International Shipments are porter signalune (for export Transporter Admonfed men maporter 7 Printed Typed Nam proporter 2 Printed Typed Nam Discrepancy	R'S CERTIFICATION R'S CERTIFICATION CONTENTS of this cons mization statement ped Name Import 1 Import 1 In Receipt of Marier The contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of t	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport soci forms of the attacher 27(a) (if I am a lerg	ording to applic d EPA Actroper e quantity gen Sig  Export from	cable international a ledgment of Consensation) or (b) (if it ammetions of the consensation) or (b) (if it ammetions of the consensation) or (b) (if it ammetions of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensations of the consensa	nd matematige to earned quant to entrywexite e leaving U.S.	tiy gen	ertal regulations.	If export ship	Mor	th Day	Year Year Year
黑	15. Ger 16. Tra 17. Tra	GENERATOR'S/OFFEROMENTED AND A SERVICE AND A SEASON OF THE CHIEF WAS THE WAS THE MANAGEMENT OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF THE CHIEF OF T	R'8 CERTIFICATION (8 CERTIFICATION (9 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICATION (10 CERTIFICAT	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport according to the attacher 27(a) (if I am a larg	ording to applic d EPA Actroper e quantity gen Sig  Export from	cable international a ledgment of Consensation) or (b) (if it am mature.  U.S. Por	nd matematige to earned quant to entrywexit: e leaving U.S.	tiy gen	ental regulations.	If export ship	Mor	th Day	Year Year Year
黑	15. Ger 16. Tra 17. Tra	GENERATOR'S (OFFERO) marked and labeled placer Exporter, I certify that the Learning that the westernin meralian's Offeror's Printed Typ  International Shipments are porter signalune (for export Transporter Admonfed men maporter 7 Printed Typed Nam proporter 2 Printed Typed Nam Discrepancy	R'S CERTIFICATION R'S CERTIFICATION CONTENTS of this cons mization statement ped Name Import 1 Import 1 In Receipt of Marier The contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of the contents of t	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport soci forms of the attacher 27(a) (if I am a lerg	ording to applic d EPA Actroper e quantity gen Sig  Export from	usble international a ledgment of Consensation) or (b) (if it amoratume) U.S. Por Oat Nature Residue	nd matematige to earned quant to entrywexite e leaving U.S.	dity gen	ertal regulations.	If export ship	Mor	th Day	Year Year Year
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S (OFFERO) marked and is belot/piccar Exporter, I certify that the or Learly that the waste mini- marabin's Offeror's Printed Typ  International Shipments are porter signature (for expor- Transporter Acknowled men insporter 2 Printed Typed National Shipments are porter 2 Printed Typed National Shipments Discrepancy  Discrepancy  Discrepancy Indication Sps	R'S CERTIFICATION R'S CERTIFICATION R'S CERTIFICATION CONTROL OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF T	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport soci forms of the attacher 27(a) (if I am a lerg	ording to applic d EPA Actroper e quantity gen Sig  Export from	usble international a ledgment of Consensation) or (b) (if it amoratume) U.S. Por Oat Nature Residue	nd matematige to earned quant to entrywexit: e leaving U.S.	dity gen	ertal regulations.  Pertial Reju	If export ship	Mor	th Day	Year Year Year
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S (OFFERO) marked and labeled placer Exporter, I certify that the Learning that the westernin meralian's Offeror's Printed Typ  International Shipments are porter signalune (for export Transporter Admonfed men maporter 7 Printed Typed Nam proporter 2 Printed Typed Nam Discrepancy	R'S CERTIFICATION R'S CERTIFICATION R'S CERTIFICATION CONTROL OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF T	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport soci forms of the attacher 27(a) (if I am a lerg	ording to applic d EPA Actroper e quantity gen Sig  Export from	usble international a ledgment of Consensation) or (b) (if it amoratume) U.S. Por Oat Nature Residue	nd matematige to earned quant to entrywexite e leaving U.S.	dity gen	ertal regulations.	If export ship	Mor	th Day	Year Year Year
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S/OFFEROMENTED AND A SERVICE AND A SUB-BOOK TO CONTRACT TO CONTRACT AND A SERVICE AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-	R'S CERTIFICATION R'S CERTIFICATION R'S CERTIFICATION CONTROL OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF T	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport soci forms of the attacher 27(a) (if I am a lerg	ording to applic d EPA Actroper e quantity gen Sig  Export from	usble international a ledgment of Consensation) or (b) (if it amoratume) U.S. Por Oat Nature Residue	nd matematige to earned quant to entrywexite e leaving U.S.	dity gen	ertal regulations.  Pertial Reju	If export ship	Mor	th Day	Year Year Year
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S OFFERO marked and labeled placar Exporter, I certify that the or I certify that the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the	R'S CERTIFICATION ded, and are in all re- contents of this cons mization statement ped Name  Import to the prily:  of Receipt of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport soci forms of the attacher 27(a) (if I am a lerg	ording to applic d EPA Actroper e quantity gen Sig  Export from	usble international a ledgment of Consensation) or (b) (if it amoratume) U.S. Por Oat Nature Residue	nd matematige to earned quant to entrywexite e leaving U.S.	dity gen	ertal regulations.  Pertial Reju	If export ship	Mor	th Day	Year Year Year About the section
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S/OFFEROMENTED AND A SERVICE AND A SUB-BOOK TO CONTRACT TO CONTRACT AND A SERVICE AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-BOOK TO CONTRACT AND A SUB-	R'S CERTIFICATION ded, and are in all re- contents of this cons mization statement ped Name  Import to the prily:  of Receipt of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier  The Content of Marier	PN: Thereby declare that expects in proper conditions to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the standard to the s	on for transport soci forms of the attacher 27(a) (if I am a lerg	ording to applic d EPA Actroper e quantity gen Sig  Export from	usble international a ledgment of Consensation) or (b) (if it amoratume) U.S. Por Oat Nature Residue	nd matematige to earned quant to entrywexite e leaving U.S.	dity gen	ertal regulations.  Pertial Reju	If export ship	Mor	th Day	Year Year Year About the section
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S/OFFEROMENTED AND AND AND AND AND AND AND AND AND AN	R'S CERTIFICATIO ded, and are in all re order of his cons mization statement ped Marrie Import 1 de conty; de Generator)  ity (or Generator)	No. 1 hereby declare that expects in proper condition from the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of	on for transport soccessings of the attached 27(a) (if I am a large	arding to applic d EPA Admost e quantity gen Sig  Export from 1 Sig	sable international a ledgment of Consent arabar) or (b) (if I am reture  U.S. Por Det  Residue  Manifest Ref	nd matematige to earnal quant to entry exits a leaving U.S.	dity gen	ertal regulations.  Pertial Reju	If export ship	Mor	th Day	Year Year Year About the section
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S OFFERO marked and labeled placar Exporter, I certify that the or I certify that the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the waste mini- marked by the the	R'S CERTIFICATIO ded, and are in all re order of his cons mization statement ped Marrie Import 1 de conty; de Generator)  ity (or Generator)	No. 1 hereby declare that expects in proper condition from the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of	on for transport soccessings of the attached 27(a) (if I am a large	ording to applic d EPA Advocate e quantity gen Sig  Export from t Sig	sable international a ledgment of Consent arabar) or (b) (if I am reture  U.S. Por Det  Residue  Manifest Ref	nd matematige to earnal quant to entry exits a leaving U.S.	dity gen	Partial Reju	If export ship	Mor	th Day	Year Year Year Year
黑	15. Ger 16. Tra Tra 18.	GENERATOR'S/OFFEROMENTED AND AND AND AND AND AND AND AND AND AN	R'S CERTIFICATIO ded, and are in all re order of his cons mization statement ped Marrie Import 1 de conty; de Generator)  ity (or Generator)	No. 1 hereby declare that expects in proper condition from the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of	on for transport soccessings of the attached 27(a) (if I am a large	arding to applic d EPA Admost e quantity gen Sig  Export from 1 Sig	sable international a ledgment of Consent arabar) or (b) (if I am reture  U.S. Por Det  Residue  Manifest Ref	nd matematige to earnal quant to entry exits a leaving U.S.	dity gen	ertal regulations.  Pertial Reju	If export ship	Mor	th Day	Year Year Year Year
TR ANSPORTER INT	15. Ger 16. Tra Tra 18.	GENERATOR'S/OFFEROMENTED AND AND AND AND AND AND AND AND AND AN	R'S CERTIFICATIO ded, and are in all re order of his cons mization statement ped Marrie Import 1 de conty; de Generator)  ity (or Generator)	No. 1 hereby declare that expects in proper condition from the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of the factor of	on for transport soccessings of the attached 27(a) (if I am a large	ording to applic d EPA Advocate e quantity gen Sig  Export from t Sig	sable international a ledgment of Consent arabar) or (b) (if I am reture  U.S. Por Det  Residue  Manifest Ref	nd matematige to earnal quant to entry exits a leaving U.S.	dity gen	Partial Reju	If export ship	Mor	th Day	Year Year Year Year
TR ANSPORTER INT	15. 16. 17. 17. 18. 18. 18. 19.	GENERATOR'S/OFFEROMENTED AND AND AND AND AND AND AND AND AND AN	R'S CERTIFICATION R'S CERTIFICATION R'S CERTIFICATION CONTROL OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF T	Nt. Thereby declare that expects in proper condition from to the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending	on for transport soci serms of the attached 27(a) (if I am a leng Type	ording to applied EPA Advocate a quantity gen Sig	sable international a ledgment of Consent arabura  U.S. Por Det  Trabura  Manifest Ret	nd matematige to fentry lexit s leaving U.S	dity gen	Partial Reju	If export ship	Mor	th Day	Year Year Year Year
TR ANSPORTER INT	15. 16. 17. 17. 18. 18. 18. 19. 1.	GENERATOR'S OFFERO marked and sheleddiplecan Exporter, I certify that the e Learning but the westernin marabin's Offeror's Printed Typ  International Shipments are porter signature (for export Transporter Actanomed men maporter 7 Printed Typed National maporter 7 Printed Typed National maporter 7 Printed Typed National maporter 7 Printed Typed National Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  Discrepancy  D	R'S CERTIFICATION R'S CERTIFICATION R'S CERTIFICATION CONTROL OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF T	Nt. Thereby declare that expects in proper condition from to the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending	on for transport soci serms of the attached 27(a) (if I am a leng Type	ording to applic d EPA Advocate a quantity gen Sig  Export from I  Sig  Sig  Sig  Sig  Annual Sig  Sig  Sig  Sig	sable international a ledgment of Consent arabura  U.S. Por Det  Trabura  Manifest Ret	nd matematige to fentry lexit s leaving U.S	dity gen	Partial Reju	If export ship	Mor	th Day	Year Year Year Year Year
TR ANSPORTER INT	15. 16. 17. 17. 18. 18. 18. 19. 1.	GENERATOR'S OFFERO marked and is beledifpiacan Exporter, I certify that the or Learly that the waste mini- marabin's Offeror's Printed Typ International Shipments are porter signature (for export Transporter Action/red) International Shipments are porter 2 Printed Typed National Discrepancy  Discrepancy  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa  Discrepancy Indication Spa	R'S CERTIFICATION R'S CERTIFICATION R'S CERTIFICATION CONTROL OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF THE CONTROL REPORT OF T	Nt. Thereby declare that expects in proper condition from to the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending of the strending	on for transport soci serms of the attached 27(a) (if I am a leng Type	ording to applic d EPA Advocate a quantity gen Sig  Export from I  Sig  Sig  Sig  Sig  Annual Sig  Sig  Sig  Sig	Residue  Manifest Ref  I, and recycling systems  I, and recycling systems  I, and recycling systems  I, and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  III and recycling systems  II	nd matematige to fentry lexit s leaving U.S	dity gen	Partial Reju	If export ship	Mor	th Day th Day fith Day fith Day	Year Year Year Year Year

GENERATOR'S INITIAL COPY

## JEV Recycling

POB_{ox} 1261 Woodinville, WA 98072 (425) 485-5415



### Incoming

omer			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	<u></u>
<u>"Člca</u>	<u> </u>	<u></u>	<del></del> -	7ip Code
ress		<u> </u>	nick No.	
ne No c	06_ <u>5_7_0</u>	<u> </u>		<del>_</del>
			PA IPH	<u>-</u>
er numb	er of yards belo	T Concrete	Concrete	Ţ——— <u>—</u>
	Concrete    2fi Minus	2ft w/ rebat	<u>2ft larger</u>	Asphalt
xample 	+	- <del> </del>	<u> </u>	<u> </u>
50/0_	<u> </u>	1/040	<u>                                     </u>	
	2	_ <del> </del>	<u> </u>	<u> </u>
			<u> </u>	
			<u> </u>	_
	5     5		. +	-+
	- <del> </del>	_ <del> </del>	<u> </u>	
- — —	7-7-	 +	 - +	- +
	- <del></del>	  _	 -	
			- <del>-</del>	_
	- + - +		i	
⊢				- <del>-  </del>
<u> </u>		<del> </del>	_	<u>L</u>

Pink copy for customer

